

# Strategies to Increase Hepatitis B Birth Dose Honor Roll Enrollees

Texas Perinatal Hepatitis B Summit, May 29, 2018

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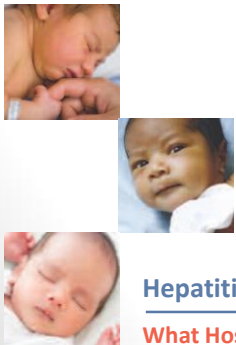


Hepatitis B

What Hospitals Need to Do to Protect Newborns

# Outline of presentation

- Background of IAC's *Give birth to the end of Hep B* project and associated honor roll
- Information to help more birthing centers reach the required 90% coverage, including:
  - Using standing orders and other written policies to standardize provision of the birth dose, and
  - Countering possible resistance to the birth dose from hospital administration, the infants' medical providers, nursing staff, and parents.
- Resources to encourage more *qualifying* birthing centers to apply to the honor roll, including ways to apply, promotional flyers to distribute, and examples of positive benefits to institutions.



# Background



## Hepatitis B

What Hospitals Need to Do to Protect Newborns

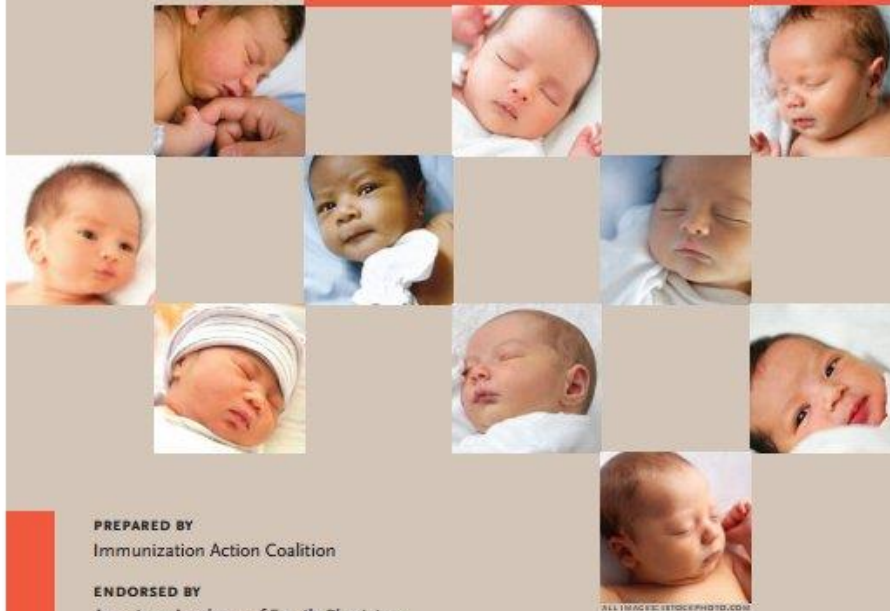
# *Give birth to the end of Hep B*

**An IAC initiative to eliminate hepatitis B virus infection in the U.S. through the prevention of perinatal transmission**



# Hepatitis B:

## What Hospitals Need to Do to Protect Newborns



**PREPARED BY**  
Immunization Action Coalition

**ENDORSED BY**  
American Academy of Family Physicians  
American Academy of Pediatrics  
American College of Obstetricians and Gynecologists  
Centers for Disease Control and Prevention

[www.immunize.org/protect-newborns/guide](http://www.immunize.org/protect-newborns/guide)

# *Give birth to the end of Hep B*

## **Hepatitis B:**

### **What Hospitals Need to Do to Protect Newborns**

*A resource for birthing institutions to prevent perinatal transmission*

Prepared by the Immunization Action Coalition (IAC)



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## Hepatitis B Birth Dose Honor Roll

### Honorees with qualifying HepB birth dose policies

AL	AK	AZ	AR	CA	CO	CT	DC	DE	FL	GA	HI
ID	IL	IN	IA	KS	KY	LA	ME	MD	MA	MI	MN
MS	MO	MT	NE	NV	NH	NJ	NM	NY	NC	ND	OH
OK	OR	PA	RI	SC	SD	TN	TX	UT	VT	VA	WA
WV	WI	WY	U.S. Territories		U.S. Military Bases Abroad						

There are currently 389 birthing institutions on the Hepatitis B Birth Dose Honor Roll.

### Alabama

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#### Baptist Medical Center South, Montgomery, AL

Reported a coverage rate of 100% from 1/1/2014 to 12/31/2014 and 99% from 1/1/2015 to 12/31/2015.

### Alaska

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#### Alaska Native Medical Center, Anchorage, AK

Reported a coverage rate of 94% from 1/1/2017 to 12/31/2017.

#### 673rd Medical Group, JBER, AK

Reported a coverage rate of 93% from 1/1/2014 to 12/31/2014 and 93% from 6/1/2015 to 6/1/2016 and 97% from 6/1/2016 to 5/31/2017.



### Apply for the Hepatitis B Birth Dose Honor Roll

Complete this online form to tell IAC about the birth dose policy in your birthing facility

✱ [Apply Now](#) | [Learn More](#) ✱

### Give birth to the end of Hep B

➔ [Learn More about the Initiative](#)



[www.immunize.org/honor-roll/birthdose/honorees.asp](http://www.immunize.org/honor-roll/birthdose/honorees.asp)  
[www.immunize.org/honor-roll/birthdose/apply.aspx](http://www.immunize.org/honor-roll/birthdose/apply.aspx)

# To be included in IAC's Hepatitis B Birth Dose Honor Roll, a birthing institution must have:

- Reported a coverage rate of 90% or greater, over a 12-month period, for administering hepatitis B vaccine before hospital discharge to all newborns, including those whose parents refuse vaccination, and
- Implemented specific written policies, procedures, and protocols to protect all newborns from hepatitis B virus infection prior to hospital discharge.





Reported a coverage rate of 90% or greater, over a 12-month period, for administering hepatitis B vaccine before hospital discharge to all newborns, **including those whose parents refuse vaccination.**

- As far as parents refusing vaccination, we realize this may be frustrating but have chosen to require these cases be included in the denominator (unlike NQF). Part of the challenge with the birth dose is convincing the parents to vaccinate.
- As far as infants immediately transferred to a higher level of care, you do *not* need to include these in your denominator if they are not in your care after birth.



Implemented specific written policies, procedures, and protocols to protect all newborns from hepatitis B virus infection prior to hospital discharge.

- ☐ Parents are informed about the importance of the hepatitis B vaccine birth dose and that it is recommended for all newborns.
- ☐ All newborns routinely receive hepatitis B vaccine after birth, before hospital discharge.
- ☐ A review is performed as to whether the correct screening test, hepatitis B surface antigen (HBsAg), was ordered for the mother during this pregnancy.
- ☐ The result of the mother's HBsAg screening test is reviewed.



## Criteria continued...

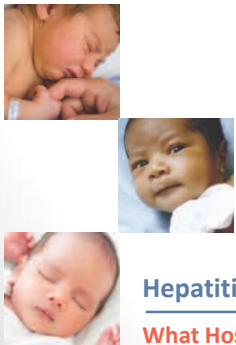
- ☐ An HBsAg blood test is ordered ASAP if an incorrect test was ordered on the mother or if no test result is included on her chart.
- ☐ Infants born to HBsAg-positive mothers receive hepatitis B vaccine and hepatitis B immune globulin (HBIG) within 12 hours of birth.
- ☐ Infants born to mothers whose HBsAg status is unknown receive hepatitis B vaccine within 12 hours of birth.
- ☐ Infants who weigh less than 2,000 grams and are born to mothers whose HBsAg status is unknown receive HBIG (in addition to hepatitis B vaccine) within 12 hours of birth.



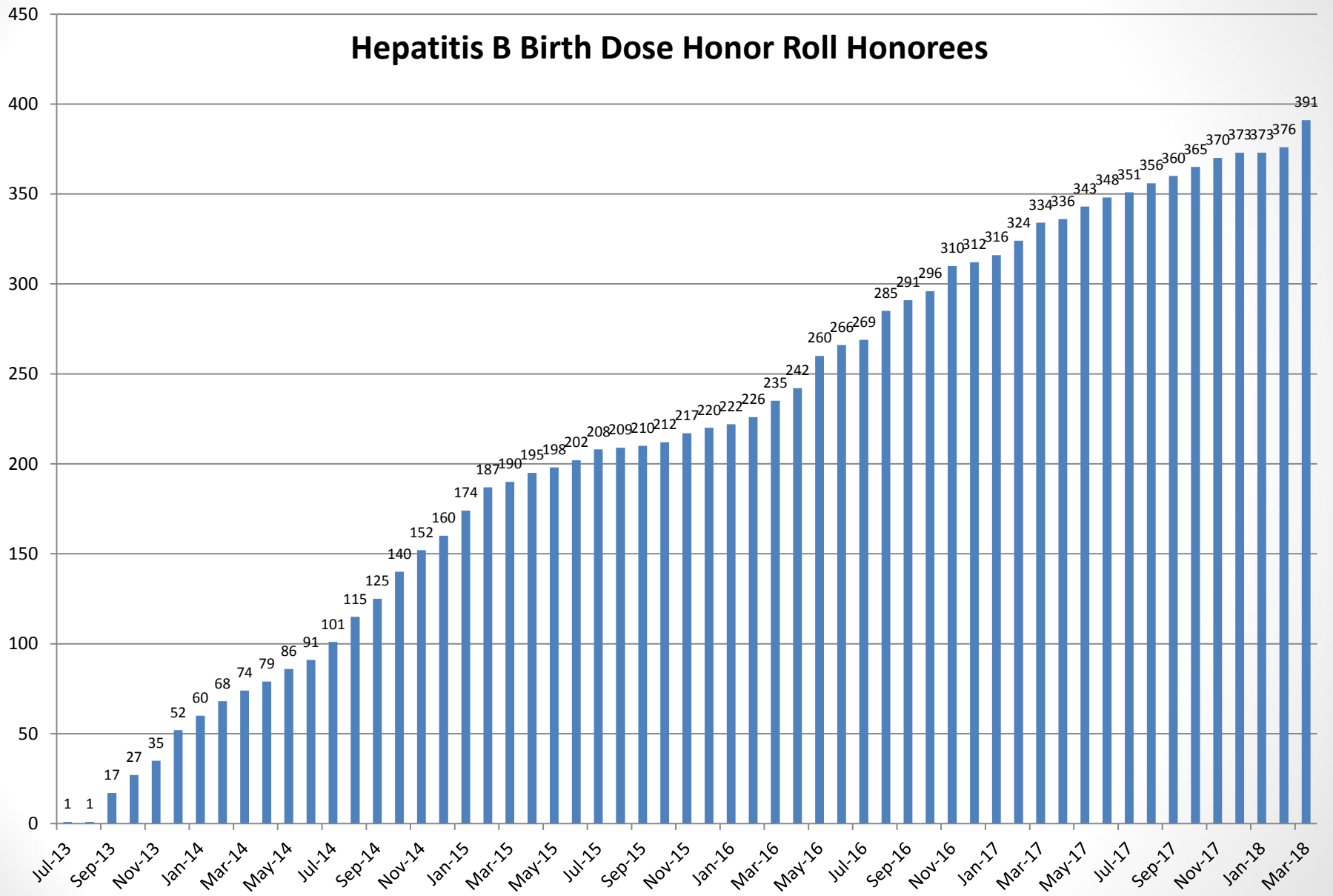
## Criteria continued...

- ☐ Routine newborn admission orders include a standing order to administer hepatitis B vaccine to all infants (similar to standing orders to administer Vitamin K and ophthalmic antibiotic).
- ☐ Notification of the state or local health department's perinatal hepatitis B prevention program is done prior to discharge (or as soon as known, if after discharge) for all mothers whose HBsAg test result is positive.

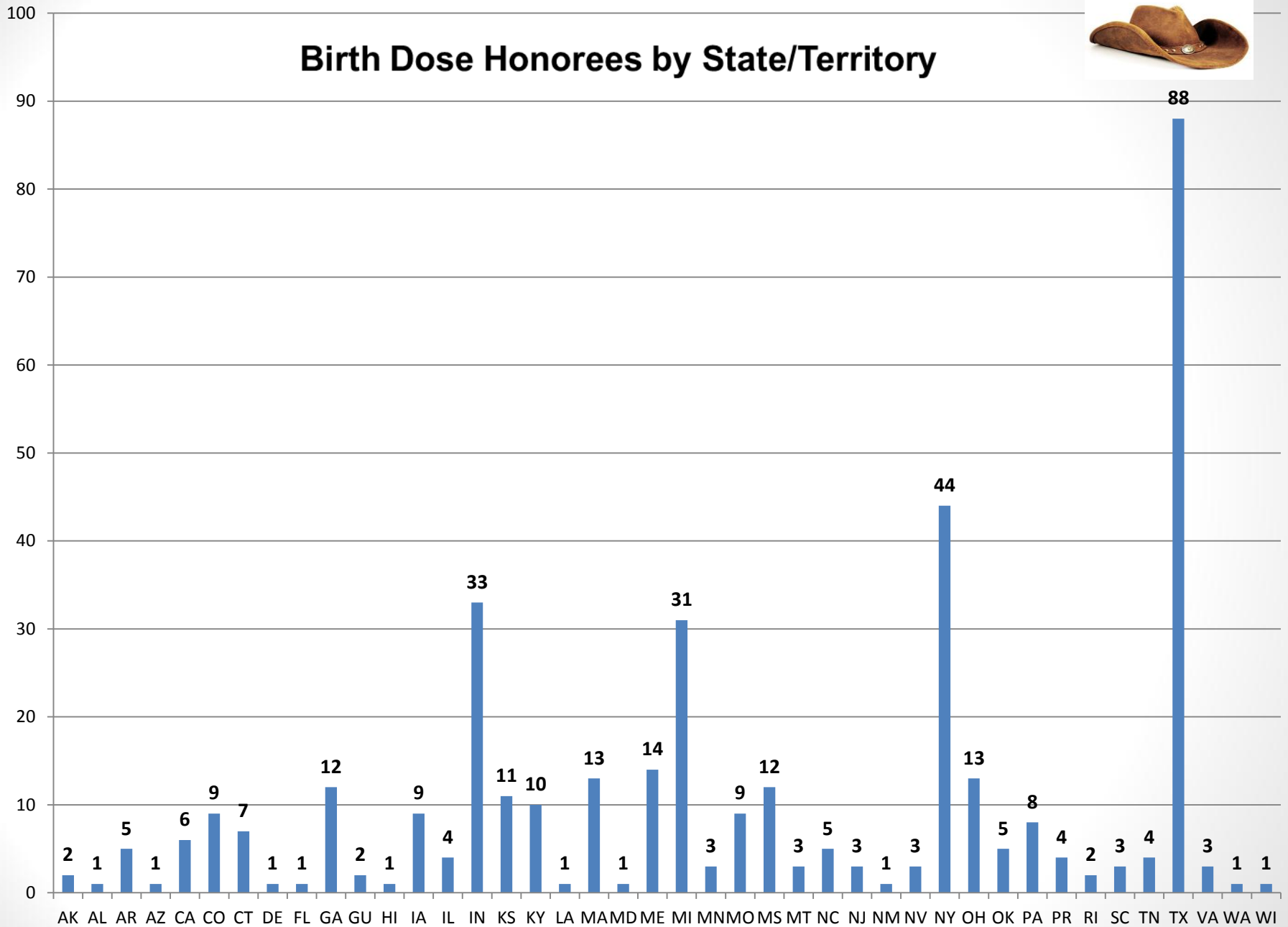
Note: Feel free to contact IAC if you vaccinate 90% or more of newborns but might not have implemented one of these criteria. There may be some wiggle room.



## Hepatitis B Birth Dose Honor Roll Honorees



# Birth Dose Honorees by State/Territory



# Information to help more birthing centers reach the required 90% coverage



## Hepatitis B

What Hospitals Need to Do to Protect Newborns

Using standing orders and other written policies to standardize provision of the birth dose





# Using standing orders and other written policies

- Standing orders are written protocols approved by a physician or other authorized practitioner that allow qualified healthcare professionals (who are eligible to do so under state law, such as registered nurses or pharmacists) to assess the need for and administer vaccine to patients meeting certain criteria, such as age or underlying medical condition.
- The use of standing orders for vaccination facilitates the delivery of immunization services and has been found to increase vaccination coverage rates.

Reference: Community Preventive Services Task Force  
[www.thecommunityguide.org/findings/vaccination-programs-standing-orders](http://www.thecommunityguide.org/findings/vaccination-programs-standing-orders)

# IAC's related resources

- *Guidance for Developing Admission Orders in Labor & Delivery and Newborn Units to Prevent Hepatitis B Virus Transmission*  
[www.immunize.org/catg.d/p2130.pdf](http://www.immunize.org/catg.d/p2130.pdf)
- *Sample Text for Developing Admission Orders in Newborn Units for the Hepatitis B Vaccine Birth Dose* [www.immunize.org/catg.d/p2131.pdf](http://www.immunize.org/catg.d/p2131.pdf)
- *Labor & Delivery HBsAg Admission Checklist for Birthing Mother*  
[www.immunize.org/catg.d/p2225.pdf](http://www.immunize.org/catg.d/p2225.pdf)



# IAC's related resources

- *10 Steps to Implementing Standing Orders for Immunization in Your Practice Setting*  
[www.immunize.org/catg.d/p3067.pdf](http://www.immunize.org/catg.d/p3067.pdf)
- *Using Standing Orders for Administering Vaccines: What You Should Know*  
[www.immunize.org/catg.d/p3066.pdf](http://www.immunize.org/catg.d/p3066.pdf)
- *How to Implement Standing Orders in Your Practice* (slide set) [www.immunize.org/catg.d/s8075.pdf](http://www.immunize.org/catg.d/s8075.pdf)



# Sample Text for Developing Admission Orders in Newborn Units for the Hepatitis B Vaccine Birth Dose

## Routine orders for all newborns

- 1 Review a copy of the mother's original lab report to ensure that the correct serologic test (HBsAg) was ordered and that it was ordered during this pregnancy. Perform a repeat HBsAg blood test on the pregnant woman (mother) if she was HBsAg negative during a prenatal visit but was at risk for acquiring HBV infection during this pregnancy (e.g., more than one sex partner in the previous 6 months, evaluation or treatment for a sexually transmitted disease, recent or current injection-drug use, or HBsAg-positive sex partner), or had clinical hepatitis since her previous testing.
- 2 Determine if the newborn is high risk and needs immediate postexposure prophylaxis within 12 hours of birth. The infant is high risk if the mother's HBsAg status is positive or unknown.

## For routine hepatitis B vaccination of normal weight infants: the mother is HBsAg negative

- 1 Administer single-antigen hepatitis B vaccine, pediatric, 0.5 mL, intramuscular (IM), in anterolateral thigh within 24 hours of birth (or sooner if the infant is discharged before 24 hours). Prior to vaccination, give the parent a Hepatitis B Vaccine Information Statement and obtain verbal consent to vaccinate. Give the parent a record of the vaccination. If parent is unwilling to give consent, notify physician ASAP. Document vaccine administration or vaccine refusal in hospital record.

NOTE: For infants weighing less than 2 kg (4.4 lbs.), administer the vaccine at hospital discharge or by 1 month of age, whichever comes first.

## For highest-risk infants: the mother is HBsAg positive

- 1 Administer Hepatitis B Immune Globulin (HBIG) 0.5 mL, IM, in anterolateral thigh in the delivery room or ASAP within 12 hours of birth. Document HBIG administration in hospital record. Give parent a record of the HBIG dose.
- 2 At same time and in opposite anterolateral thigh, administer single-antigen hepatitis B vaccine, pediatric, 0.5 mL, IM, ASAP within 12 hours of birth. Document vaccine administration in hospital record. Give parent a record of the vaccination.
- 3 Prior to administering both HBIG and hepatitis B vaccine, give parent a Hepatitis B Vaccine Information Statement and obtain verbal consent to vaccinate. If parent unwilling to give consent, notify physician ASAP. Consider notifying Child Protective Services if parent continues to refuse despite discussion with physician.
- 4 Notify the local or state health department of the infant's birth and the date and time of administration of HBIG and hepatitis B vaccine doses.
- 5 Obtain the name, address, and phone number of the newborn's primary care provider.
- 6 Notify primary care provider of newborn's birth, the date and time that HBIG and hepatitis B vaccine doses were administered, and the importance of additional on-time vaccination (infants weighing less than 2 kg (4.4 lbs) will require 4 doses of vaccine as the first dose does not "count") and postvaccination testing of the infant for HBsAg and antiHBs (antibody to HBsAg) 1–2 months after completion of the hepatitis B vaccine series and no earlier than when the infant is 9–12 months of age.

NOTE: The optimal timing for serologic testing to detect a vaccine response generally is 1–2 months after the final dose of the HepB vaccine series. Results of tests for HBsAg can be transiently positive for 1–18 days after vaccination. Serologic testing should be performed no earlier than age 9 months to avoid detection of passive anti-HBs from hepatitis B immune globulin administered at birth and to maximize the likelihood of detecting late HBV infection.

CONTINUED ON THE NEXT PAGE ►

## Sample Text for Developing Admission Orders in Newborn Units for the Hep B Vaccine Birth Dose (continued)

page 2 of 2

- 7 Provide advice to the mother. Tell her the following:
  - a That she may breast-feed her infant upon delivery, even before hepatitis B vaccine and HBIG are given;
  - b It is critical for her infant to complete the full hepatitis B vaccine series on the recommended schedule;
  - c Blood tests (HBsAg and anti-HBs) will need to be obtained from the infant 1–2 months after completion of the hepatitis B vaccine series (at 9–12 months of age) to determine if the infant developed a protective immune response to vaccination or needs additional management;
  - d About modes of HBV transmission and the need for testing and vaccination of susceptible household, sexual, and needle-sharing contacts;
  - e She and other infected contacts need to have medical evaluations for chronic hepatitis B, including assessment to determine if they are candidates for antiviral treatment.

## For high-risk infants: the mother's HBsAg status is unknown

- 1 Administer single-antigen hepatitis B vaccine (0.5 mL, IM) within 12 hours of birth. For infants weighing less than 2 kg (4.4 lbs) at birth, also administer hepatitis B immune globulin (HBIG 0.5 mL, IM) within 12 hours. Do not wait for test results to return before giving this dose of vaccine (and HBIG for infants weighing less than 2 kg [4.4 lb]). Document vaccine administration in the hospital record. Give the parent a record of the vaccination.
- 2 Confirm that the laboratory has received blood for the mother's HBsAg test.
- 3 Verify when the mother's HBsAg result will be available and that it will be reported to the newborn unit ASAP.
- 4 If the laboratory test indicates the mother's HBsAg test result is positive, do the following:
  - a Administer HBIG 0.5 mL, IM, ASAP to the newborn weighing 2 kg (4.4 lb) or more. (Those weighing less than 2 kg (4.4 lb) at birth should have already received HBIG.) (Hepatitis B vaccine should have been given within 12 hours of birth to all infants of mothers with unknown HBsAg status.)
  - b Follow steps 4–7 of the previous section (see "For highest-risk infants: the mother is HBsAg positive").

## REFERENCES

1. A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States. Part 1: Immunization of Infants, Children and Adolescents. MMWR, December 23, 2005, Vol. 54 (RR-16):1–39, at [www.cdc.gov/mmwr/pdf/r/r5416.pdf](http://www.cdc.gov/mmwr/pdf/r/r5416.pdf).
2. CDC. Update: Shortened interval for postvaccination serologic testing of infants born to hepatitis B-infected mothers. MMWR, 2015;64:11118–20 at [www.cdc.gov/mmwr/pdf/wk/mm6439.pdf](http://www.cdc.gov/mmwr/pdf/wk/mm6439.pdf).
3. CDC. Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, United States, 2017, at [www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf](http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf).

► For additional detailed information about text that you might incorporate into newborn admission orders, including orders for premature infants, refer to *Guidance for Developing Admission Orders in Labor & Delivery and Newborn Units to Prevent Hepatitis B Virus Transmission* available at [www.immunize.org/catg.d/p2130.pdf](http://www.immunize.org/catg.d/p2130.pdf).

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[www.immunize.org/handouts/hepatitis-b-vaccines.asp](http://www.immunize.org/handouts/hepatitis-b-vaccines.asp)

Countering possible resistance to the birth dose from hospital administration, the infants' medical providers, nursing staff, and parents



In 2008, IAC surveyed hepatitis B coordinators and healthcare professionals about issues related to the universal administration of the birth dose of hepatitis B vaccine. One of the goals of this survey was to investigate why all U.S. infants were *not* receiving the first dose of hepatitis B vaccine before hospital discharge despite such a recommendation from ACIP, AAP, AAFP, and ACOG. This question explored such possible barriers as healthcare provider knowledge of the related ACIP recommendations, agreement/disagreement with the recommendations, convenience of office versus hospital vaccine administration, financial considerations for provider and parents, use of combination vaccines (including knowledge of how to use them with a monovalent dose of hepB vaccine at birth and acceptance/resistance to giving four doses of hepB vaccine instead of three), and parental refusal.

The survey responses demonstrated that there are many challenges to hospitals and birthing centers in implementing, and following, comprehensive policies and procedures to prevent perinatal HBV. In fact, when you consider that there are at least 4 separate groups with possible objections to such policies, it's a wonder that the birth dose rate is as high as 71.1% and more infants aren't infected every year.





Hospital administration  
Medical providers  
Nursing staff  
Parents



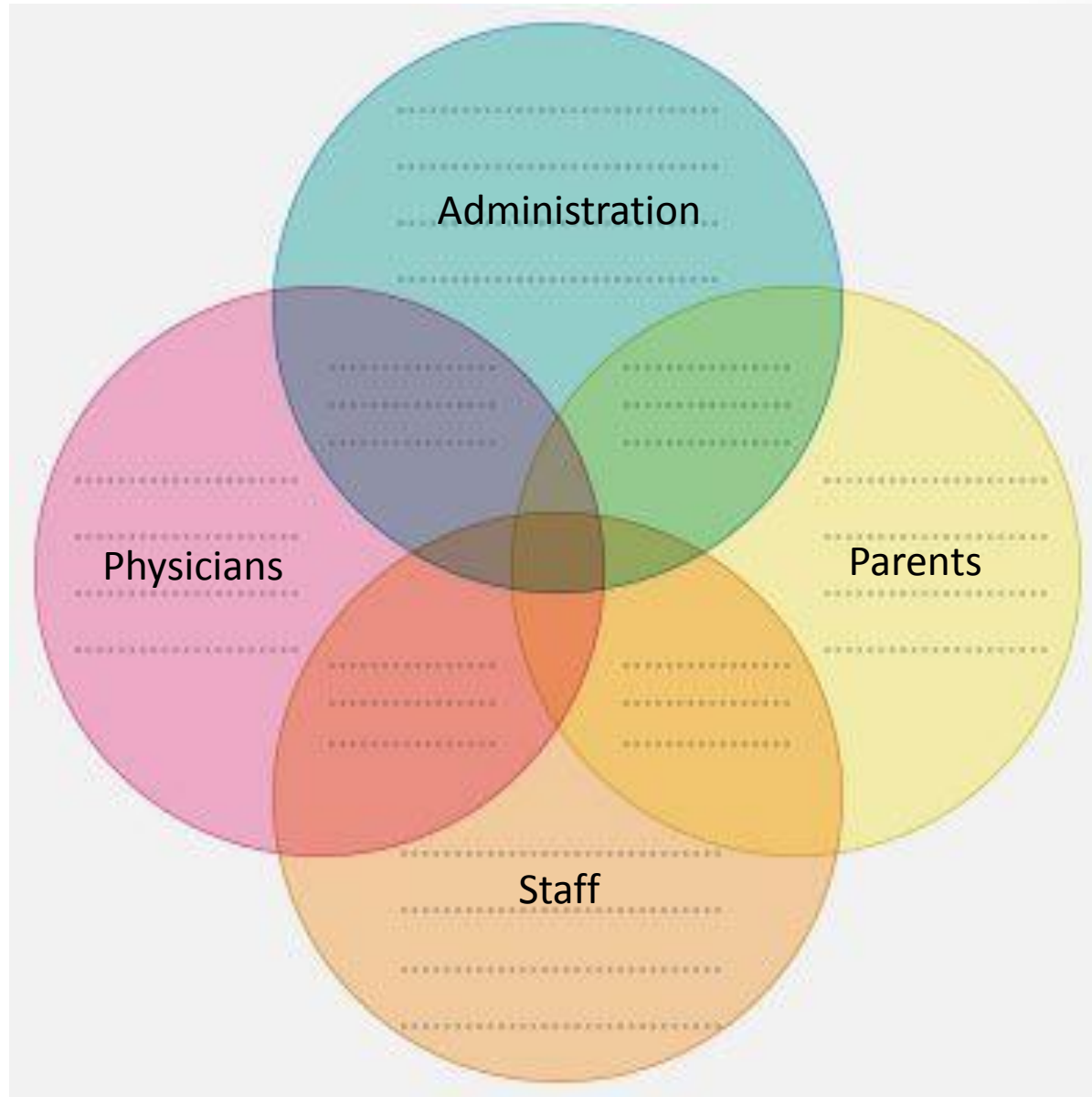
## Hepatitis B

What Hospitals Need to Do to Protect Newborns



You will realize that many of these objections are intertwined and have an influence on each other. For example, the greater the percentage of vaccine-resistant parents, the less likely it is that nurses will want to 'waste time' talking to families about the birth dose, or physicians will want to push the practice when they feel their patients are not at risk. Or if a number of the hospitals' attending physicians do not want their patients getting the birth dose, it is less probably likely that administration will push such a policy.





# Hospital Administrators

- Providing a 'birth dose' of HepB vaccine is the gold standard of medical practice, and recommended by:
  - The Advisory Committee on Immunization Practice
  - The Centers for Disease Control and Prevention
  - The American Academy of Pediatrics
  - The American Academy of Family Physicians
  - The American College of Obstetricians and Gynecologists

In addition, the birth dose coverage rate has been adopted as a measure of hospital quality by the National Quality Forum.



## **Prevention of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices**



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

## Universal Vaccination of Infants

All infants should receive the HepB vaccine series as part of the recommended childhood immunization schedule, beginning at birth as a safety net.

For all medically stable infants weighing  $\geq 2,000$  grams at birth and born to HBsAg-negative mothers, the first dose of vaccine should be administered within 24 hours of birth (new recommendation). Only single-antigen HepB vaccine should be used for the birth dose.

Infants weighing  $< 2,000$  grams and born to HBsAg-negative mothers should have their first vaccine dose delayed to the time of hospital discharge or age 1 month (even if weight is still  $< 2,000$  grams). For these infants, a copy of the original laboratory report indicating that the mother was HBsAg negative during this pregnancy should be placed in the infant's medical record. Infants weighing  $< 2,000$  grams at birth have a decreased response to HepB vaccine administered before age 1 month.



# Hospital Administrators

Based on average rates of newborn hepatitis B vaccination in hospitals and on vaccine efficacy, CDC estimates that more than 800 newborns become chronically infected with HBV each year.

What happens if an infant becomes infected because the institution wasn't following the national recommendation from all these medical groups????



Hepatitis B

What Hospitals Need to Do to Protect Newborns

# Medical Errors Put Infants at Risk for Chronic Hepatitis B Virus Infection – Six Case Reports

Since 1990, New York state has had a law mandating hepatitis B surface antigen (HBsAg) testing of all pregnant women, reporting of positive HBsAg results, and treatment of infants born to HBsAg-positive women. Compliance with these mandates and current Centers for Disease Control and Prevention recommendations for perinatal hepatitis B prevention is closely monitored through routine visits to birthing hospitals to conduct record reviews and provide education for hospital staff. Despite these efforts, medical errors continue to be made that put infants at risk for chronic hepatitis B virus (HBV) infection. These errors underscore the importance of administering the first dose of hepatitis B vaccine at birth, before discharge from the hospital.

Although 85%–95% percent of perinatal hepatitis B virus infections can be prevented by appropriate prophylactic treatment, many newborns don't receive such prophylaxis. Approximately 90% of infants who become infected will develop chronic HBV infection with all its serious potential sequelae, including possible cirrhosis and liver cancer later in life. To better protect newborns against chronic HBV infection, the New York State Department of Health Immunization Program provides state-funded hepatitis B vaccine, free of charge, to any birthing hospital that institutes a universal hepatitis B birth dose policy.

*The following six cases from New York were reported in April 2005 by Elizabeth J. Herlihy, RN, BSN, MS, who was the New York State Department of Health's hepatitis B coordinator at that time. The cases illustrate a variety of medical errors that led to high-risk newborns not receiving the recommended hepatitis B prophylaxis (0.5 mL hepatitis B vaccine and 0.5 mL hepatitis B immune globulin [HBIG] within 12 hours of birth).*

## Case Report #1

A woman known to be chronically infected with HBV delivered her third infant a month early at a birthing hospital. Unfortunately, her HBsAg status was incorrectly recorded in her hospital record as negative. The hospital did not have a universal birth dose policy, so the infant received no hepatitis B vaccine at birth. The mother assumed that the baby was vaccinated because her other two infants had been treated appropriately. A few weeks later (at the time of the mother's original due date), the public health department contacted her to make sure the infant had been vaccinated. They discovered the mother had not been given a shot record for her newborn upon discharge, nor had vaccines ever been discussed with her at the hospital. The hospital was contacted, and it was discovered that the infant had not received any prophylaxis. The first dose of vaccine was immediately administered, but by then the infant was already one month old.

## Case Report #2

A woman in labor presented to a suburban birthing hospital. The hospital staff found that she had not been tested for HBsAg this pregnancy because her family practice physician said she was negative two years ago so "not to worry about it." The hospital correctly ordered a test, but did not ask the test to be done as quickly as possible and did not give the infant hepatitis B vaccine dose #1 within 12 hours of birth as recommended. The infant was discharged two days after birth; the mother's HBsAg test came back positive three days after birth. That same day, public health representatives tracked down the family and made sure the infant immediately received vaccine dose #1 and HBIG. Hepatitis vaccine doses #2 and #3 were given according to the recommended schedule.

Embarrassment, possible bad publicity and legal action....



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## Two More Infants Chronically Infected with Hepatitis B Virus...the Medical Errors Continue

Approximately 24,000 women with chronic hepatitis B virus (HBV) infection give birth in the United States each year. Although 85%–95% of perinatal HBV infections can be prevented by post-exposure prophylaxis (hepatitis B vaccine and hepatitis B immune globulin [HBIG]) given within 12 hours of birth, many high-risk newborns (infants of HBsAg-positive mothers) don't receive this recommended postexposure prophylaxis, or even hepatitis B vaccine alone which will prevent 70%–90% of perinatal HBV infections.

Unfortunately, children who become infected when they are younger than one year of age have a 90% chance of developing chronic hepatitis B virus infection with all its serious potential sequelae, including an up to 25% risk of death from cirrhosis or liver cancer later in life.

*The following two cases from Colorado illustrate how easily unprotected babies can become chronically infected children.*

### Case Report #1

This case occurred in December 1999. The mother was of Hmong ethnicity, born in Thailand. She had been diagnosed with chronic HBV infection in 1994 during her first pregnancy; this pregnancy was her third. In her prenatal record she was documented to be HBsAg and HBeAg positive, and this information appeared in several places on the record that was sent to the hospital. Despite this, her baby did not receive HBIG or the first dose of hepatitis B vaccine in the hospital. As a matter of fact, the hepatitis B vaccine order was crossed out in the newborn's chart. Follow-up with the pediatrician at six days of age indicated that the baby still had not received any prophylaxis. The first dose of vaccine was given when the infant was three weeks of age, the second three months after the first, and the third six months after the first.

Upon contacting the hospital where the baby was delivered to determine why HBIG and hepatitis B vaccine were not given within 12 hours of birth, the state health department representative was told that it was unclear how this baby was missed and perhaps it was because the hospital had no hepatitis B vaccine at the time of delivery. They indicated that the infant was to receive the first dose of vaccine at the pediatrician's office. However, this did not happen until the baby was three weeks of age, and only after the office was contacted by the state health department to request that it be done. The child's current status is unfortunate. Diagnosed HBsAg-positive at 19 months of age, the child is being followed by a liver specialist for chronic HBV infection.

### Case Report #2

This case occurred in August 2001, in a different hospital and city. The mother was also of Asian descent (Indonesian) and had tested positive for HBsAg midway through her pregnancy. The HBsAg lab result was recorded on the prenatal record, which was sent to the hospital. The hospital staff also recorded the HBsAg-positive test result on the hospital's obstetrical evaluation sheet. It was not acted upon by either the delivering physician or the labor and delivery staff, nor was the mother's HBsAg-positive test result communicated to or noted by the newborn nursery. The hospital did not have a policy in place to address management of babies born to HBsAg-positive mothers or to mothers of unknown status. The infant received neither HBIG nor hepatitis B vaccine at birth. In fact, the high-risk infant did not receive the first dose of hepatitis B vaccine until two months of age. Unfortunately, this child has also tested HBsAg positive.



### Hepatitis B:

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Unnecessary lifelong chronic HBV infection



# Unprotected Infant Dies of Fulminant Hepatitis B

The Immunization Action Coalition (IAC) publishes **Unprotected People Reports** about people who have suffered or died from vaccine-preventable diseases. Nancy Fasano, formerly of the Michigan Department of Community Health, submitted the following case report to IAC. Serious medical errors occurred in this case resulting in the death of a 3-month-old infant. Take measures to make certain that errors such as these do not occur in your practice or hospital. Up to 95% of perinatal infections can be prevented by post-exposure prophylaxis given within 12 hours of birth. Tragically, many babies are exposed to hepatitis B at birth but do not receive appropriate postexposure prophylaxis. Prevent tragedies like these by administering the first dose of hepatitis B vaccine to all newborns at birth, no later than hospital discharge.

## Case Report

On December 13, 1999, a previously healthy 3-month-old infant of Southeast Asian descent was brought to a local Michigan hospital emergency department and was admitted following a 5-day history of fever, diarrhea, and jaundice.

Upon admission to the hospital, hepatitis B serology was obtained along with liver function tests and liver enzymes.

*Investigation revealed that the infant's mother had tested positive for HBsAg during her pregnancy but that the test result was communicated incorrectly as "hepatitis negative" to the hospital where the baby was born.*

Laboratory results revealed that the infant was hepatitis B surface antigen (HBsAg) positive and IgM core antibody (IgM anti-HBc) positive with elevated total bilirubin 16.6, direct bilirubin 4.7, ALT 693, and AST 203. The infant's test results were reported to the local health department on

**Protect EVERY newborn from hepatitis B virus infection!**

**Give the first dose of hepatitis B vaccine before hospital discharge.**

December 14, 1999. The infant's mother was tested at the same time and was found to be HBsAg positive and anti-HBc positive.

A diagnosis of hepatic failure due to hepatitis B virus (HBV) infection was made and the infant was transferred to another hospital on December 16 for possible liver transplantation. After transfer, the infant developed seizures and her condition deteriorated rapidly. She died on December 17.

Investigation revealed that the infant's mother had tested positive for HBsAg during her pregnancy but that the test result was communicated incorrectly as "hepatitis negative" to the hospital where the baby was born. Neither the laboratory nor the prenatal care provider reported the HBsAg-positive test results to the local health department as required by state law. The infant received no hepatitis B vaccine and no hepatitis B immune globulin (HBIG) at the time of birth.

The hospital where the infant was born had suspended administration of hepatitis B vaccine to all newborns during the summer of 1999 due to the concern about the presence of thimerosal used as a preservative in hepatitis B vaccine. The first dose of hepatitis B vaccine wasn't administered to this infant until two months of age. **This tragedy could have been averted.**

► A DISCUSSION FOLLOWS ON THE NEXT PAGE

And possibly death



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## States Report Hundreds of Medical Errors in Perinatal Hepatitis B Prevention

### Avoid tragic mistakes – vaccinate newborns against HBV in the hospital

■ By Teresa A. Anderson, DDS, MPH, and Deborah L. Wedler, MD<sup>®</sup>

On two annual surveys conducted by the Immunization Action Coalition covering the period from July 1999 to October 2002 (see first entry in “Related Resources” on page 13), state and local hepatitis coordinators reported more than 500 medical errors regarding perinatal hepatitis B prevention. Examples of types of errors included:

- not properly prophylaxing infants born to HBsAg-positive mothers with both hepatitis B vaccine and hepatitis B immune globulin (HBIG) within 12 hours of birth
- not giving hepatitis B vaccine to infants born to mothers of unknown HBsAg status within 12 hours of birth
- misinterpreting or mistranscribing hepatitis B screening test results, or failing to communicate results to or within the hospital
- ordering the wrong hepatitis B screening test for pregnant women

Because of these types of errors, many children are now chronically infected with hepatitis B virus (HBV) and at least one infant has died. Children infected when less than one year of age have a 90% chance of developing chronic HBV infection with all its serious potential sequelae, such as cirrhosis and liver cancer.

- Consider the following examples of medical errors reported by the nation’s hepatitis coordinators where infants were needlessly put at risk for perinatal HBV infection.

#### MEDICAL ERROR TYPE #1

**Infants born to HBsAg-positive mothers did not receive both hepatitis B vaccine and HBIG within 12 hours of birth.**

*Recommendation of the Centers for Disease Control and Prevention (CDC), American Academy of Pediatrics (AAP), American Academy of Family Physicians (AAFP), and the American College of Obstetricians and Gynecologists (ACOG): All infants of HBsAg-positive mothers (including premature infants) should receive hepatitis B vaccine and HBIG within 12 hours of birth.*

#### CASE REPORT EXAMPLES

“The mother had been diagnosed with chronic hepatitis B in 1994. In her prenatal record she was documented to be HBsAg and HBeAg positive, and this information appeared in several places on the record that was sent to the hospital. Despite this, her baby did not receive HBIG or the first dose of hepatitis B vaccine in the hospital. In fact, the hepatitis B vaccine order was crossed out in the infant’s chart. Follow-up with the pediatrician on day six indicated that the baby still had not received any prophylaxis. The first dose of vaccine was given when the infant was three weeks of age, the second dose three months after the first, and the third dose six months after the first. The child’s current status is unfortunate. Diagnosed HBsAg-positive at 19 months of age, the child is now being followed by a liver specialist for chronic hepatitis B.”

“We have two cases where infants born to carrier mothers received the first dose of hepatitis B vaccine three weeks after birth and no HBIG. In one of the cases, a resident interviewed the mother who claimed she was not HBsAg positive.”

“In 2000, we had 25 cases where the babies of positive moms did not receive HBIG at birth. Three of these babies are now infected. In one of the cases, the mother’s status was erroneously



Hepatitis B:

What Hospitals Need to Do to Protect Newborns

10

[www.immunize.org/protect-newborns](http://www.immunize.org/protect-newborns)

In two surveys conducted by IAC, state and local hepatitis coordinators reported more than 500 medical errors regarding perinatal hepatitis B prevention.

These errors in perinatal hepatitis B prevention occurred at any time – beginning with the woman’s first prenatal visit and extending beyond the mother’s and infant’s hospital discharge.

The errors were made by a broad range of perinatal healthcare workers including obstetricians, family physicians, pediatricians, nurses, lab technicians, and clerical staff.

Only a universal hepatitis B vaccine birth dose policy in every birthing institution will optimize the protection of all infants from human error and chronic HBV infection.

# Types of related medical errors

People make mistakes when ordering and interpreting this test. For example, antibody to hepatitis B surface antigen (antiHBs) is ordered in error, instead of hepatitis B surface antigen (HBsAg), which means a negative result doesn't mean the woman isn't infected, rather that she doesn't have immunity. Other times a test result is misinterpreted or mistranscribed (e.g., a non-medically trained clerk assumes "positive" means everything is okay).



# Medical errors cont...

In one study of 190 hospitals, 87.2% of the delivering mothers' charts did not include the recommended laboratory copy of her hepatitis B test results. In the same study, test results of women infected with HBV were misinterpreted or mistranscribed **more than half the time** (i.e., of 27 women with a documented POSITIVE HBsAg test result, in 15 cases the maternal test result was different or missing in the infant's chart).

Gaps in Hospital Policies and Practices to Prevent Perinatal Transmission of Hepatitis B Virus; *Pediatrics*. 2010 Apr;125(4).



# Hospital Administrators

Hospitals cannot afford to provide hepatitis B vaccine to every newborn.

- This is an issue because the birth dose is often “bundled” with other perinatal services, so insurance will not pay separately for it (hence the hospital ‘loses’ money when giving the dose, while the pediatrician can later charge for the vaccine and its administration). But, is money worth a life?
- Some states make free hepatitis B vaccine available to all infants to simplify the process and eliminate problems related to some families receiving free vaccine and others having to pay.
- Hospitals should enroll in the federally funded VFC program to obtain free hepatitis B vaccine for administration of the birth dose to newborns who are eligible.



It is important to note that free vaccine alone does not guarantee high birth dose rates. Success is more closely tied to hospitals, birthing centers, and healthcare professionals who support the birth dose.

It is worthwhile to work on educating the administrators, physicians, and nursing staff at birthing institutions to make sure they're supportive of a universal birth dose policy.





# Physicians

- First, don't assume all physicians know the ACIP/CDC/AAP/AAFP/ACOG recommendations to give the birth dose.
- Second, share the information/resources related to related medical errors (see previous section) \*STUFF\* happens!
- Third, here are some objections that may be specific to attending physicians...



# Physicians

“I prefer to give the first dose in the office.”

- I can bill for the vaccine administration.
- The infant only receives 3 doses of hepatitis B vaccine using combination vaccines (as opposed to 4 with the birth dose).
- All the records will be in one place/care will be continual.
- I like to talk to parents about the value of immunization at the first appointment.





As far as #1 (billing for vaccine administration in the office), given that about 800 infants become chronically infected with HBV each year in the United States, many unnecessarily because of medical errors and the lack of a safety dose of hepatitis B vaccine, we assume that no healthcare professional would claim that money alone is worth the risk of a life.



## Hepatitis B

What Hospitals Need to Do to Protect Newborns

# Physicians

“Administering the first dose in the hospital results in the infant receiving an extra dose of vaccine when combination vaccines are used.”

- This is not a problem, medically.
- The use of a 4-dose hepatitis B vaccine schedule has not increased vaccine reactogenicity and results in higher final antibody titers that could correlate with longer duration of detectable antibody.
- The federal VFC program provides up to four doses of hepatitis B vaccine for VFC-eligible children.
- Providers may still use monovalent hepatitis B vaccine in a 3-dose series.



# Physicians

“All the records will be in one place/care will be continual.”

- A minor recordkeeping problem would be a small cost for a potentially life-saving intervention.
- However, with immunization registries in all states, coordination should be simple. If the first dose of vaccine is given in the hospital, the birth dose and all infant demographic information can be electronically populated into the state registry by the hospital. This actually saves the practice time.



# Physicians

“I like to talk to parents about the value of immunization at the first appointment.”

- A noble goal! But isn't it also possible that giving a birth dose of hepatitis B vaccine will also have a positive impact on the parents' view of immunization (and of the knowledgeable and caring healthcare professionals who want to protect their child)?
- Studies have shown that infants who get the birth dose are more likely to complete the hepatitis B vaccine series in a timely fashion.



# Physicians

“The birth dose is not necessary if the mother is HBsAg negative.” *(and my pts are all negative)*

- This is a biggie! Our 2009 survey of healthcare professionals found that 19% agreed, and another 11% neither agreed nor disagreed, with the statement, “I am aware of the CDC and AAP vaccination recommendations but believe they are often made with the general public health in mind and don’t necessarily apply to my patients.”
- Provide the information about medical errors. The mother may not actually be negative.
- The infant could be exposed to HBV postnatally from another family member or caregiver. This occurs in two-thirds of the cases of childhood transmission.



# Physicians

“Hepatitis B vaccine alone (without HBIG) will not protect an infant born to an HBsAg-positive mother.”

- Studies have shown that infants of the most highly infectious mothers (women who are both HBsAg and HBeAg positive) who receive postexposure prophylaxis with hepatitis B vaccine alone (without HBIG) at birth are protected in 70%–95% of cases.



# Physicians

“Giving the first dose within 24 hours exposes me to blame for causing problems the infant may develop.”

- Hepatitis B vaccine is very safe. More than one billion hepatitis B shots have been given worldwide. In the United States, more than 120 million people, including infants, children, and adults have received hepatitis B vaccine. The majority of children who receive this vaccine have no side effects.
- If an infant develops a problem later in life, there is little likelihood that this can be medically or legally tied to a dose of hepatitis B vaccine given after birth.
- On the other hand, not providing the vaccine (or at least, strongly recommending it) can lead to an infant becoming chronically infected and potential legal culpability.



## Hepatitis B

What Hospitals Need to Do to Protect Newborns

# Nursing Staff

- Again, don't assume all nurses know the ACIP/CDC/AAP/AAFP/ACOG recommendations to give the birth dose.
- Again, share the information/resources related to related medical errors (see earlier section)
- Finally, here are some objections that may be specific to nursing staff...





# Nursing Staff

“Nurses don't have time to educate the parents and vaccinate every newborn in the nursery. Taking on the role of administering hepatitis B vaccine creates a tremendous additional workload for our staff.”

- It's true that providing the birth dose adds some work for the staff. Fortunately, it gets easier with time and eventually gets to be just part of the routine.
- Make the process as efficient as possible by using standing orders.
- Good educational handouts for parents can cut down on the time needed for one-on-one conversation, and provide answers to questions that all staff may not be prepared to answer.



# Sample Text for Developing Admission Orders in Newborn Units for the Hepatitis B Vaccine Birth Dose

## Routine orders for all newborns

- 1 Review a copy of the mother's original lab report to ensure that the correct serologic test (HBsAg) was ordered and that it was ordered during this pregnancy. Perform a repeat HBsAg blood test on the pregnant woman (mother) if she was HBsAg negative during a prenatal visit but was at risk for acquiring HBV infection during this pregnancy (e.g., more than one sex partner in the previous 6 months, evaluation or treatment for a sexually transmitted disease, recent or current injection-drug use, or HBsAg-positive sex partner), or had clinical hepatitis since her previous testing.
- 2 Determine if the newborn is high risk and needs immediate postexposure prophylaxis within 12 hours of birth. The infant is high risk if the mother's HBsAg status is positive or unknown.

## For routine hepatitis B vaccination of normal weight infants: the mother is HBsAg negative

- 1 Administer single-antigen hepatitis B vaccine, pediatric, 0.5 mL, intramuscular (IM), in anterolateral thigh within 24 hours of birth (or sooner if the infant is discharged before 24 hours). Prior to vaccination, give the parent a Hepatitis B Vaccine Information Statement and obtain verbal consent to vaccinate. Give the parent a record of the vaccination. If parent is unwilling to give consent, notify physician ASAP. Document vaccine administration or vaccine refusal in hospital record.

NOTE: For infants weighing less than 2 kg (4.4 lbs.), administer the vaccine at hospital discharge or by 1 month of age, whichever comes first.

## For highest-risk infants: the mother is HBsAg positive

- 1 Administer Hepatitis B Immune Globulin (HBIG) 0.5 mL, IM, in anterolateral thigh in the delivery room or ASAP within 12 hours of birth. Document HBIG administration in hospital record. Give parent a record of the HBIG dose.
- 2 At same time and in opposite anterolateral thigh, administer single-antigen hepatitis B vaccine, pediatric, 0.5 mL, IM, ASAP within 12 hours of birth. Document vaccine administration in hospital record. Give parent a record of the vaccination.
- 3 Prior to administering both HBIG and hepatitis B vaccine, give parent a Hepatitis B Vaccine Information Statement and obtain verbal consent to vaccinate. If parent unwilling to give consent, notify physician ASAP. Consider notifying Child Protective Services if parent continues to refuse despite discussion with physician.
- 4 Notify the local or state health department of the infant's birth and the date and time of administration of HBIG and hepatitis B vaccine doses.
- 5 Obtain the name, address, and phone number of the newborn's primary care provider.
- 6 Notify primary care provider of newborn's birth, the date and time that HBIG and hepatitis B vaccine doses were administered, and the importance of additional on-time vaccination (infants weighing less than 2 kg (4.4 lbs) will require 4 doses of vaccine as the first dose does not "count") and postvaccination testing of the infant for HBsAg and antiHBs (antibody to HBsAg) 1–2 months after completion of the hepatitis B vaccine series and no earlier than when the infant is 9–12 months of age.

NOTE: The optimal timing for serologic testing to detect a vaccine response generally is 1–2 months after the final dose of the HepB vaccine series. Results of tests for HBsAg can be transiently positive for 1–18 days after vaccination. Serologic testing should be performed no earlier than age 9 months to avoid detection of passive anti-HBs from hepatitis B immune globulin administered at birth and to maximize the likelihood of detecting late HBV infection.

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immunization  
admission orders



Sample Text for Developing Admission Orders in Newborn Units for the Hep B Vaccine Birth Dose (continued) page 2 of 2

- 7 Provide advice to the mother. Tell her the following:
  - a That she may breast-feed her infant upon delivery, even before hepatitis B vaccine and HBIG are given;
  - b It is critical for her infant to complete the full hepatitis B vaccine series on the recommended schedule;
  - c Blood tests (HBsAg and anti-HBs) will need to be obtained from the infant 1–2 months after completion of the hepatitis B vaccine series (at 9–12 months of age) to determine if the infant developed a protective immune response to vaccination or needs additional management;
  - d About modes of HBV transmission and the need for testing and vaccination of susceptible household, sexual, and needle-sharing contacts;
  - e She and other infected contacts need to have medical evaluations for chronic hepatitis B, including assessment to determine if they are candidates for antiviral treatment.

## For high-risk infants: the mother's HBsAg status is unknown

- 1 Administer single-antigen hepatitis B vaccine (0.5 mL, IM) within 12 hours of birth. For infants weighing less than 2 kg (4.4 lbs) at birth, also administer hepatitis B immune globulin (HBIG 0.5 mL, IM) within 12 hours. Do not wait for test results to return before giving this dose of vaccine (and HBIG for infants weighing less than 2 kg [4.4 lb]). Document vaccine administration in the hospital record. Give the parent a record of the vaccination.
- 2 Confirm that the laboratory has received blood for the mother's HBsAg test.
- 3 Verify when the mother's HBsAg result will be available and that it will be reported to the newborn unit ASAP.
- 4 If the laboratory test indicates the mother's HBsAg test result is positive, do the following:
  - a Administer HBIG 0.5 mL, IM, ASAP to the newborn weighing 2 kg (4.4 lb) or more. (Those weighing less than 2 kg (4.4 lb) at birth should have already received HBIG.) (Hepatitis B vaccine should have been given within 12 hours of birth to all infants of mothers with unknown HBsAg status.)
  - b Follow steps 4–7 of the previous section (see "For highest-risk infants: the mother is HBsAg positive").

## REFERENCES

1. A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States. Part 1: Immunization of Infants, Children and Adolescents. MMWR, December 23, 2005, Vol. 54(RR-16):1–39, at [www.cdc.gov/mmwr/pdf/rr/rr5416.pdf](http://www.cdc.gov/mmwr/pdf/rr/rr5416.pdf).
2. CDC. Update: Shortened interval for postvaccination serologic testing of infants born to hepatitis B-infected mothers. MMWR, 2015;64:1118–20 at [www.cdc.gov/mmwr/pdf/wk/mm6439.pdf](http://www.cdc.gov/mmwr/pdf/wk/mm6439.pdf).
3. CDC. Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, United States, 2017, at [www.cdc.gov/vaccines/schedules/downloads/child10-18yrs-child-combined-schedule.pdf](http://www.cdc.gov/vaccines/schedules/downloads/child10-18yrs-child-combined-schedule.pdf).

► For additional detailed information about text that you might incorporate into newborn admission orders, including orders for premature infants, refer to *Guidance for Developing Admission Orders in Labor & Delivery and Newborn Units to Prevent Hepatitis B Virus Transmission* available at [www.immunize.org/catg.d/p2130.pdf](http://www.immunize.org/catg.d/p2130.pdf).

[www.immunize.org/catg.d/p2131.pdf](http://www.immunize.org/catg.d/p2131.pdf)

# Guidance for Developing Admission Orders in Labor & Delivery and Newborn Units to Prevent Hepatitis B Virus Transmission

The guidelines in this document were developed to help hospitals establish policies and standing orders in their labor and delivery (L&D) and newborn units.

In February 2017, CDC released its updated recommendation to administer the hepatitis B birth dose within 24 hours of birth to all newborns in its "Recommended Immunization Schedule for Children and Adolescents." The American Academy of Pediatrics, American Academy of Family Physicians, and American College of Obstetricians and Gynecologists have all endorsed the hepatitis B birth dose recommendation. To obtain a copy of the 2017 schedule, go to [www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf](http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf).

To protect infants from HBV infection, CDC recommends that all delivery hospitals institute standing orders or admission orders, and protocols to ensure healthcare professionals do the following:

1. Administer hepatitis B vaccine to ALL newborns within 24 hours of birth, or at hospital discharge, whichever comes first.
2. Identify all infants born to mothers who have hepatitis B surface antigen (HBsAg) positive or to mothers with unknown HBsAg status. Administer appropriate immunoprophylaxis to these infants.

## Admission orders and procedures for women admitted to a birthing facility

For pregnant women who have a HBsAg lab report included in their prenatal records, do the following:

1. Examine a copy of the original laboratory report of the pregnant woman's HBsAg test result to verify that the correct test (i.e., HBsAg) was performed and to verify that the testing date was during this pregnancy not a previous one. Do not rely on a handwritten or transcribed HBsAg test result!
2. Place a copy of the original HBsAg lab report into (1) the pregnant woman's L&D record and (2) the infant's hospital record (or have a link to the mother's HBsAg test result).
3. If the pregnant woman is HBsAg positive, alert the nursery staff that the newborn is high risk and will need postexposure prophylaxis – both hepatitis B immune globulin (HBIG) and hepatitis B vaccine – within 12 hours of birth.
4. Perform a repeat blood test for HBsAg if the pregnant woman was HBsAg negative during a prenatal visit but was at risk for acquiring HBV infection during this pregnancy (e.g., more than

one sex partner in the previous 6 months, evaluation or treatment for a sexually transmitted disease, recent or current injection drug use, or HBsAg positive sex partner), or had clinical hepatitis since her previous testing.

5. Instruct the laboratory to call L&D and the nursery with the HBsAg test result ASAP.

For pregnant women who do not have an HBsAg lab report on their prenatal record, do the following:

1. Perform HBsAg testing ASAP on women who do not have a copy of an original HBsAg laboratory report from the current pregnancy included in their prenatal record.
2. Instruct the lab to call L&D and the nursery units with the newly obtained HBsAg test result ASAP.

## Admission orders and procedures for newborns

### Hospital procedures to follow for ALL newborns

1. Review a copy of the mother's original HBsAg lab report to ensure that the correct serologic test was ordered and that it was ordered during this pregnancy.
2. Determine if the newborn needs immediate postexposure prophylaxis within 12 hours of birth. To do this you must know the mother's HBsAg status and the newborn's birth weight. If the newborn weighs less than 2 kg (4.4 lb), see the descriptions below and footnotes 2, 4, 5.
3. Prior to vaccination, give parent a Hepatitis B Vaccine Information Statement (available at [www.immunize.org/vis](http://www.immunize.org/vis)).
4. If an infant is transferred to a higher level of care facility prior to vaccination, inform the receiving facility it is their responsibility to administer the hepatitis B vaccine.

### For newborns of HBsAg-negative mothers

1. Administer single-antigen hepatitis B vaccine (0.5 mL, IM) within 24 hours of birth, or at hospital discharge, whichever comes first, to all newborns weighing 2 kg (4.4 lb) or more at birth.<sup>2,3</sup>
2. Document the hepatitis B vaccine dose in the newborn's medical record, including the date, time, and site of administration, as well as the vaccine lot number.
3. Give the mother an immunization record card that includes the hepatitis B vaccination date. Explain the importance of completing the hepatitis B vaccine series to protect her baby. Remind her to bring the immunization record card with her each time her baby sees a provider.

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Textual content reviewed by the Centers for Disease Control and Prevention  
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## Guidance for Developing Admission Orders in Labor & Delivery and Newborn Units (continued)

page 2 of 2

### For newborns of mothers with unknown HBsAg status, do the following:

1. Administer single-antigen hepatitis B vaccine (0.5 mL, IM) within 12 hours of birth.<sup>4,5</sup> Do not wait for test results to return before giving this dose of vaccine.
2. Document the hepatitis B vaccine dose in the newborn's medical record, including date, time, and site of administration, as well as the vaccine lot number.
3. Give the mother an immunization record card that includes the hepatitis B vaccination date. Explain the importance of completing the hepatitis B vaccine series to protect her baby. Remind her to bring the immunization record card with her each time her baby sees a provider.
4. Confirm that the laboratory has received blood for the mother's HBsAg test.
5. Verify when the mother's HBsAg result will be available and that it will be reported to L&D and the newborn unit ASAP.
6. If the nursery does not receive the report of the mother's HBsAg test at the expected time, call the laboratory for the result.
7. If the laboratory test indicates the mother's HBsAg test result is positive, do the following:
  - a. Administer HBIG (0.5 mL, IM) to the newborn ASAP. (Hepatitis B vaccine should have been given within 12 hours of birth.)
  - b. Document the HBIG dose in the newborn's medical record. There is little benefit in administering HBIG to the newborn if more than 7 days have elapsed since birth.
  - c. Alert the mother's and newborn's physician(s) of the test result.
  - d. Follow the instructions below "For newborns of HBsAg-positive mothers," steps 3–7.
8. If the newborn must be discharged before the mother's HBsAg result is known:
  - a. Document the parents' contact information (e.g., addresses, telephone numbers, emergency contacts) in case further treatment is needed for the infant.
  - b. Obtain the name, address, and phone number of the mother's and the newborn's healthcare providers.
  - c. Notify the mother's and newborn's healthcare providers that the mother's HBsAg test result is pending.

### For newborns of HBsAg-positive mothers

1. Administer HBIG (0.5 mL, IM) and single-antigen hepatitis B vaccine<sup>6</sup> (0.5 mL, IM) at separate injection sites within 12 hours of birth.
2. Document the hepatitis B vaccine and HBIG dose in the newborn's medical record, including the date, time, and site of administration, as well as the vaccine lot number.
3. Give the mother an immunization record card that includes the hepatitis B vaccination and HBIG dates. Explain the importance of completing the hepatitis B vaccine series to protect her baby. Remind her to bring the record card each time her baby sees a provider.
4. Notify the local or state health department of the infant's birth and the date and time of administration of HBIG and hepatitis B vaccine doses.

5. Obtain the name, address, and phone number of the newborn's primary care provider.
6. Notify the provider of the newborn's birth, the date and time of HBIG and hepatitis B vaccine doses administered, and the importance of additional on-time vaccination as well as postvaccination testing of the infant for both HBsAg and antibody to HBsAg (anti-HBs) after completion of the hepatitis B vaccine series to assess the hepatitis B status of the infant following vaccination.
7. Provide advice to the mother. Tell her the following:
  - a. That she may breast-feed her infant upon delivery, even before hepatitis B vaccine and HBIG are given;
  - b. That it is critically important for the protection of her baby's health that the baby receives the full hepatitis B vaccine series on the recommended schedule;
  - c. That blood tests (HBsAg and antibody to hepatitis B surface antigen [anti-HBs]) need to be drawn from the baby 1–2 months after completion of the 3- or 4-dose hepatitis B vaccine series and also no earlier than 9–12 months of age to determine if the child developed a protective immune response to vaccination or needs additional management;
  - d. About modes of HBV transmission and the need for testing and vaccination of susceptible household, sexual, and needle-sharing contacts;
  - e. That she needs to have a medical evaluation for chronic hepatitis B, including an assessment of whether she is a candidate for antiviral treatment.

### FOOTNOTES

1. Be sure the correct test for HBsAg (hepatitis B surface antigen) was/is ordered. The HBsAg test should not be confused with other hepatitis B serologic tests, including antibody to HBsAg (anti-HBs) and antibody to hepatitis B core antigen (anti-HBc or HBcAb).
2. Infants weighing less than 2 kg (4.4 lb) at birth and whose mothers are documented to be HBsAg positive should receive the first dose of vaccine 1 month after birth or at hospital discharge, whichever comes first. The mother's HBsAg test result must be part of the infant's medical record.
3. Federal law requires that you give parents a Hepatitis B Vaccine Information Statement (VIS) before vaccine administration. To obtain a VIS, download it from the IAC website at [www.immunize.org/vis](http://www.immunize.org/vis).
4. An infant weighing less than 2 kg (4.4 lb) whose mother's HBsAg status is unknown should receive HBIG and hepatitis B vaccine within 12 hours of birth. Do not count the hepatitis B vaccine dose as the first dose in the vaccine series. Reinitiate the full hepatitis B vaccine series at age 1–2 months.
5. An infant weighing less than 2 kg (4.4 lb) whose mother is HBsAg positive should receive the first dose of hepatitis B vaccine and HBIG within 12 hours of birth. Do not count the hepatitis B vaccine dose as the first dose in the vaccine series. Reinitiate the full hepatitis B vaccine series at age 1–2 months.
6. The optimal timing for serologic testing to detect a vaccine response generally is 1–2 months after the final dose of the HepB vaccine series. Results of tests for HBsAg can be transiently positive for 1–18 days after vaccination. Serologic testing should be performed no earlier than age 9 months to avoid detection of passive anti-HBs from hepatitis B immune globulin administered at birth and to maximize the likelihood of detecting late HBV infection (see "Update: Shortened interval for postvaccination serologic testing of infants born to hepatitis B-infected mothers," *MMWR*, 2015;64:1118–20).

► For "Sample Text for Developing Admission Orders in Newborn Units for the Hepatitis B Birth Dose," visit [www.immunize.org/catg.d/p2131.pdf](http://www.immunize.org/catg.d/p2131.pdf).

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# Immunization Action Coalition


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## Vaccine Information Statements

### Hepatitis B VIS

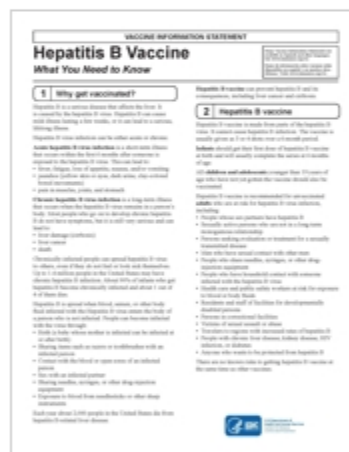


#### Hepatitis B VIS

July 20, 2016

### Up-to-date translations

You are encouraged to distribute the up-to-date **English-language VIS** at the same time as the translation.

[Arabic](#)
[Armenian](#)
[Burmese](#)
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### How to use VISs



**You Must Give Your Patients Vaccine Information Statements (VISs) – It's Federal Law!**

Explains why it is necessary to always use the most current version of a VIS and lists the current VIS dates

### Related materials from IAC

[Ask the Experts](#)
[Handouts](#)

# Nursing Staff

“A newborn's immune system will not respond well to a dose of hepatitis B vaccine given within the first 24 hours/These infants are just too small to poke with a needle.”

- Hepatitis B vaccine can be administered soon after birth with only minimal decrease in immunogenicity, compared with administration at older ages, and no decrease in protective efficacy. The only medical reason to postpone the first dose of hepatitis B vaccine is with infants weighing <2,000 g if the mother is documented to be HBsAg-negative at the time of the infant's birth
- Yes, the infant is probably going to cry a bit (but better than being infected with a potentially deadly virus for life!) There are ways to help make a shot less stressful (to not only the baby, but the nurse and the parent).



## Hepatitis B

What Hospitals Need to Do to Protect Newborns



[www.cdc.gov/vaccines/parents/visit/less-stressful.html](http://www.cdc.gov/vaccines/parents/visit/less-stressful.html)

Also from CDC: How to Hold Your Child During Vaccinations  
[www.cdc.gov/vaccines/parents/tools/holds-factsheet.html](http://www.cdc.gov/vaccines/parents/tools/holds-factsheet.html)



# Be there for your child during shots.



Before shots

## Infants:

- Bring your child's immunization record.
- Read vaccine information statements.
- Ask any questions.
- Bring along a favorite toy or blanket.
- Stay calm—your baby picks up your feelings.

## Toddlers—All above, plus:

- Reassure your child honestly, "It might sting but it will only last a few seconds."
- Never threaten your child with shots, "If you are not good, I will have the nurse give you a shot."
- Encourage older siblings to reassure and comfort, not to scare your toddler.



During shots

## Infants—Distract and comfort by:

- Touching soothingly and talking softly.
- Making eye contact as you smile at him/her.

## Toddlers—Also try:

- Holding your child securely on your lap.
- Talking to or singing with your child.
- Helping your child take deep breaths and slowly blow out the pain.
- Using a hand puppet.
- Pointing out posters or objects around the room.
- Telling your child a story or have him/her tell you one.
- Allowing your child to cry, don't force him/her to be brave.



After shots

## Infants—Comfort by:

- Holding, cuddling, caressing, and/or breastfeeding.
- Talking lovingly and soothingly.

- Asking your doctor for advice on using a non-aspirin pain reliever when you get home.

## Toddlers—Also try:

- Giving praises and hugs or a surprise.
- Reassuring your child that everything is okay.



At home

- Mark your calendar for your next appointment.
- Review vaccine information statements for possible reactions.

- A cool wet cloth can reduce redness, soreness, and/or swelling where the shot was given.

- Observe your child for the next few days. You might see a small rash or notice a fever. If your child has any reaction that concerns you, call your doctor or seek medical attention.

- To reduce pain or fever, your doctor may recommend you give your child a non-aspirin pain reliever.

- Also try giving your child a sponge bath with lukewarm water to reduce fever.

- Give your child plenty of fluids. It is normal if he/she eats less than usual for the next 24 hours.



A parent's love makes all the difference.



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IPP-686 ES (1/01)

<http://eziz.org/assets/docs/IMM-686ES.pdf>



Antes de las vacunas:

## Niños menores de 12 meses:

- Traiga la tarjeta de vacunas a todas las citas con su médico.
- Lea la información sobre las vacunas que va a recibir su hijo(a).
- Si tiene preguntas, pregúntele a la enfermera o médico.
- Manténgase calmado(a) para que su bebé aprenda de usted.
- Traiga el juguete o cobija favorita de su hijo(a).

## Niños mayores de 12 meses—

Todo lo anterior, pero también trate de:

- Asegurarle que todo va a estar bien, pero no le mienta. Dígale que, "puede que duela un poco, pero sólo por unos segundos."

- NO amenazarlo con vacunas, "Si no te portas bien le voy a decir a la enfermera que te dé una vacuna."



Durante las vacunas:

## Niños menores de 12 meses—

Distráiga y consuele a su hijo haciendo lo siguiente:

- Acarícielo tiernamente y háblele suavemente mirándole a los ojos y sonriéndole.

## Niños mayores de 12 meses—

Todo lo anterior y quizás:

- Siéntese a su hijo(a) en sus piernas mientras le administran las vacunas.
- Cuéntele o cantele su historia o canción favorita, (si es posible anime a que su hijo(a) le cuente o cante su cuento o canción favorita).

- Ayude a su hijo a que respire profundamente y que imagine que sopla lentamente el dolor hacia fuera de su cuerpo.

- Use un titere de mano.
- Plátique con su hijo y enséñele cosas alrededor del cuarto donde estén.

- Déjelo(a) que lllore—no le pida que sea valiente.



Después de las vacunas:

## Niños menores de 12 meses—

Consuele a su hijo de la siguiente manera:

- Deténgalo(a) en brazos hablándole y acariciándole tiernamente, o dele pecho.

## Niños mayores de 12 meses—

Todo lo anterior y quizás también:

- Dele o prométale un premio por portarse bien—esta edad les gusta recibir halagos, abrazos, curitas o calcomanías.

- Asegúrele que todo está bien.
- Pregúntele a su doctor(a) si recomienda el uso de medicina sin aspirina para reducir la fiebre o dolor.



Cuando llegue a casa:

- Apunte en su calendario la siguiente cita para vacunas.

- Lea las hojas de información de las vacunas que recibió sobre posibles reacciones.

- Observe a su niño por los siguientes tres o cuatro días. Puede que le dé un pequeño sarpullido o fiebre. Si su hijo(a) presenta cualquier reacción seria, llámenos o busque atención médica.

- Para reducir el dolor o la fiebre, algunos médicos recomiendan el uso de medicinas sin aspirina.

- También puede darle un baño de agua tibia para reducir la fiebre.

- Dele a tomar muchos líquidos. Es normal si no quiere comer.

- Una toalla húmeda y fresca puede reducir lo hinchado, sarpullido y dolor en el lugar donde la inyección fue puesta.



Dele amor y cariño a su bebé durante las vacunas.



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# Parents

Some of the most common reasons parents refuse the birth dose of hepatitis B vaccine:

- My baby is safe from perinatal hepatitis B virus transmission because I am not in a high-risk group. I am monogamous and don't use drugs.
- I've been tested for HBV and know I'm not infected so my baby is at no risk from perinatal infection. Why I should I vaccinate my child just to provide a safety net to others?
- My baby isn't possibly going to be exposed to the virus for many years, if ever. Why give the vaccine at birth?
- Vaccines are full of dangerous [*fill in the blank*] that will hurt my infant. Or, at least, I want to wait to vaccinate until my baby is bigger and better able to handle vaccination.



My baby is safe from perinatal hepatitis B virus transmission because I am not in a high-risk group. I am monogamous and don't use drugs.

Although most cases in the U.S., occur through sexual contact or drug use, approximately 30% of people newly infected with HBV don't know how they contracted the virus. You can get infected through any contact with an infected person's blood or body fluids, even fluids you can't see. HBV is a hardy virus that can exist on surfaces for 7 days, and can be spread without engaging in any so-called "risky" behavior. Sadly, there are many documented cases of transmission related to medical care.



## Unusual Cases of Hepatitis B Virus Transmission in Medical Settings

**A**lthough routine hepatitis B vaccination has been recommended for healthcare professionals since 1982, transmission of hepatitis B virus (HBV) continues to occur in medical settings. Transmission has been documented between patients, from patients to healthcare professionals, and from healthcare professionals to patients. Many HBV outbreaks have been associated with assisted glucose monitoring and reuse of blood collection lancets (illustrative examples are provided below). Because of this increased risk, in 2011 the Advisory Committee on Immunization Practices recommended routine hepatitis B vaccination for previously unvaccinated persons with diabetes (MMWR 2011;60(50):1709–1711).

In 2012 only 65% of healthcare professionals reported having received hepatitis B vaccine (MMWR 2014; 63(5): 95–102). Improved vaccination coverage among healthcare professionals will not only protect them directly, but also reduce the risk of transmission in health care settings.

An editorial about the report summarized in item #6 below stated, "There and in other instances, investigators have been unable to explain how the virus traveled from person A to person B – and that is troubling. It is troubling because it suggests that there are aspects of transmission of bloodborne disease that remain poorly understood." (Transmission of hepatitis B in the health care setting: the elephant in the room...or the mouse? Allos BM, Schaffner W. J Infect Dis 2007; 195(9):1245–7.)

### 1. Notes from the field: deaths from acute hepatitis B virus infection associated with assisted blood glucose monitoring in an assisted-living facility – North Carolina, August–October 2010. MMWR 2011; 60(06):182.

**SUMMARY:** On October 12, 2010, the North Carolina Division of Public Health and the Wayne County Health Department were notified by a local hospital of four residents of a single assisted-living facility with suspected acute HBV infection. An investigation identified unsafe practices, including sharing of reusable fingerstick lancing devices approved for single patient use only and shared use of blood glucose meters without cleaning and disinfection between patients. Eight residents whom facility staff had assisted with blood glucose monitoring were eventually hospitalized, and six died from hepatitis B complications.

LINK: [www.cdc.gov/mmwr/preview/mmwrhtml/mm6006a.5.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6006a.5.htm)

### 2. Five hepatitis B outbreaks in care homes in the U.K. associated with deficiencies in infection control practice in blood glucose monitoring. Duffell EF, Milne LM, Seng C, et al. Epidemiol Infect 2011; 139(3):327–35.

**SUMMARY:** This article is an account of the investigations into a series of HBV outbreaks linked to the use of lancing devices in community healthcare settings in the United Kingdom. Between February 2004 and December 2006, nine individuals with acute HBV infection were reported to five local units of the Health Protection Agency. Investigations identified an additional 12 individuals with HBV infection who were residents in these settings. The epidemiological

and environmental evidence suggests that HBV transmission occurred mostly from a significant breakdown in infection control measures in blood glucose testing.

LINK: [www.ncbi.nlm.nih.gov/pubmed/20478083](http://www.ncbi.nlm.nih.gov/pubmed/20478083)

### 3. Multiple clusters of hepatitis virus infections associated with anesthesia for outpatient endoscopy procedures. Gutelius B, Perz JF, Parker MM, et al. Gastroenterology. 2010; 139(1):163–70.

**SUMMARY:** An outbreak of hepatitis B and hepatitis C occurred in two separate outpatient endoscopy facilities. An anesthesiologist was found to have used a single-patient-use vial of propofol for multiple patients. Reuse of syringes to redose patients, with resulting contamination of medication vials used for subsequent patients, likely resulted in viral transmission.

LINK: [www.ncbi.nlm.nih.gov/pubmed/20353790](http://www.ncbi.nlm.nih.gov/pubmed/20353790)

### 4. Acute hepatitis B outbreaks related to fingerstick blood glucose monitoring in two assisted living facilities. Counard CA, Perz JF, Linchango PC, et al. J Am Geriatr Soc 2010; 58(2):306–11.

**SUMMARY:** At assisted living facility A, five confirmed acute, two probable acute, and one probable chronic HBV infections were identified in the 109 residents tested. All of the eight identified residents with HBV infection had diabetes mellitus. Transmission of HBV was associated with fingerstick blood glucose monitoring and insulin injections. At Facility B, seven of 21 residents (33.3%) receiving fingerstick blood glucose monitoring had evidence of recent HBV infection.

LINK: [www.ncbi.nlm.nih.gov/pubmed/20070418](http://www.ncbi.nlm.nih.gov/pubmed/20070418)

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[www.immunize.org/catg.d/p2101.pdf](http://www.immunize.org/catg.d/p2101.pdf) • Item #P2101 (2/16)

## Unusual Cases of Hepatitis B Virus Transmission in the Community

**O**ne reason some parents don't vaccinate their children against the hepatitis B virus (HBV) is their belief that their child has no risk of ever coming in contact with the virus. "My child will never be promiscuous or addicted to drugs. Why does he or she need to be protected against hepatitis B?" Of course, it is impossible to predict which children will grow up and engage in risky behavior. But let's assume for a moment that this parent is right...does this mean that his or her child has no possibility of ever coming in contact with HBV?

The truth is that transmission of HBV can sometimes occur in unusual ways. Approximately 30% of people newly infected with HBV do not know how they contracted it.

The following reports of some uncommon methods of HBV transmission in community settings illustrate how every unvaccinated person is at some (albeit limited) risk of HBV infection.

These examples are not presented to scare. Such modes of transmission are relatively rare, and sexual activity is still the predominant source of HBV infection among U.S. adults. However, these reports demonstrate that one can acquire HBV infection without engaging in so-called "risky" behavior. There is also a risk of HBV transmission in medical settings, between patients, from patients to health care personnel, and from health care personnel to patients. For more information on this issue, see the IAC publication titled "Unusual Cases of Hepatitis B Virus Transmission in Medical Settings" available at [www.immunize.org/catg.d/p2101.pdf](http://www.immunize.org/catg.d/p2101.pdf).

By avoiding obvious means of exposure, people can reduce the odds of becoming infected. But in reality, anyone can get HBV infection. Fortunately, the availability of hepatitis B vaccine means no one has to.

### 1. Hepatitis B "by proxy": an emerging presentation of chronic hepatitis B in children. Sciveres M, Maggiore G. J Pediatr Gastroenterol Nutr 2007; 44(2):268–9.

**SUMMARY:** Six persons in Italy developed acute HBV infection from their adopted children, all of whom were asymptomatic.

LINK: [www.ncbi.nlm.nih.gov/pubmed/17255843](http://www.ncbi.nlm.nih.gov/pubmed/17255843)

### 2. Risk factors for hepatitis B in an outbreak of hepatitis B and D among injection drug users. Bialek SR, Bower WA, Mottram K, et al. J Urban Health 2005 Sep; 82(3):468–78.

**SUMMARY:** In 2000 an outbreak of 12 cases of hepatitis B occurred among injection drug users in Pierce County, Wash. Three of the infected people died. Injecting more than four times a day and having more than one sex partner were risk factors for infection.

LINK: [www.ncbi.nlm.nih.gov/pubmed/16049202](http://www.ncbi.nlm.nih.gov/pubmed/16049202)

### 3. Prevalence of hepatitis B and C virus infection in barbers in the Sivas region of Turkey. Candan F, Alagoz H, Poyraz O, Somer H, et al. Occup Med 2002; 52(1):31–4.

**SUMMARY:** Because barbers may be exposed to their customers' blood, a study in Turkey attempted to determine the prevalence of HBV and HCV infection in barbers compared

to a comparison group. The prevalence of antibodies against HBV was higher in the group of 176 barbers (39.8%) than in the control group (28.3%). Most of the seropositive subjects had been exposed to needle pricks or scissor cuts.

LINK: [www.ncbi.nlm.nih.gov/pubmed/11872792](http://www.ncbi.nlm.nih.gov/pubmed/11872792)

### 4. Hepatitis B outbreak in a state correctional facility, 2000. MMWR 2001; 50(25):529–32.

**SUMMARY:** An outbreak of hepatitis B occurred among inmates of a high-security state correctional facility. The index case was an inmate who was found to be an inmate with chronic hepatitis B virus infection. Risk factors for infection included injecting drugs, having sex with another man, using a razor that had been used by another inmate, and receiving a tattoo.

LINK: [www.cdc.gov/mmwr/preview/mmwrhtml/mm5025a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5025a1.htm)

### 5. Horizontal transmission of hepatitis B virus among players of an American football team. Tobe K, Matsuura K, Ogura T, et al. Arch Intern Med 2000; 160(16):2541–5.

**SUMMARY:** Eleven cases of HBV infection were detected among 65 members of the Okayama University's football team during a period of 19 months. All players with acute HBV infection belonged to the same training group as a

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I've been tested for HBV and know I'm not infected so my baby is at no risk from perinatal infection. Why I should I vaccinate my child just to provide a safety net to others?

Although this makes perfect theoretical sense, it isn't so clear-cut in the real world.



# I've been tested for HBV and know I'm not infected

- No medical test is 100% accurate, so there is a small chance that a negative result isn't correct.
- You might have become infected with HBV after being screened during an early prenatal visit or too close in time to the test for it to detect the early stage of infection.
- Children can be infected at a young age by people other than their mothers, such as another family member, a caregiver, or another child.
- And medical errors happen (tests are mis-ordered or mis-transcribed or mis-interpreted)



## States Report Hundreds of Medical Errors in Perinatal Hepatitis B Prevention

### Avoid tragic mistakes – vaccinate newborns against HBV in the hospital

■ By Teresa A. Anderson, DDS, MPH,  
and Deborah L. Wexler, MD\*

On two annual surveys conducted by the Immunization Action Coalition covering the period from July 1999 to October 2002 (see first entry in "Related Resources" on page 13), state and local hepatitis coordinators reported more than 500 medical errors regarding perinatal hepatitis B prevention. Examples of types of errors included:

- not properly prophylaxing infants born to HBsAg-positive mothers with both hepatitis B vaccine and hepatitis B immune globulin (HBIG) within 12 hours of birth
- not giving hepatitis B vaccine to infants born to mothers of unknown HBsAg status within 12 hours of birth
- misinterpreting or mistranscribing hepatitis B screening test results, or failing to communicate results to or within the hospital
- ordering the wrong hepatitis B screening test for pregnant women

Because of these types of errors, many children are now chronically infected with hepatitis B virus (HBV) and at least one infant has died. Children infected when less than one year of age have a 90% chance of developing chronic HBV infection with all its serious potential sequelae, such as cirrhosis and liver cancer.

- Consider the following examples of medical errors reported by the nation's hepatitis coordinators where infants were needlessly put at risk for perinatal HBV infection.



Hepatitis B:  
What Hospitals Need to Do to Protect Newborns

#### MEDICAL ERROR TYPE #1

Infants born to HBsAg-positive mothers did not receive both hepatitis B vaccine and HBIG within 12 hours of birth.

*Recommendation of the Centers for Disease Control and Prevention (CDC), American Academy of Pediatrics (AAP), American Academy of Family Physicians (AAFP), and the American College of Obstetricians and Gynecologists (ACOG): All infants of HBsAg-positive mothers (including premature infants) should receive hepatitis B vaccine and HBIG within 12 hours of birth.*

#### CASE REPORT EXAMPLES

"The mother had been diagnosed with chronic hepatitis B in 1994. In her prenatal record she was documented to be HBsAg and HBeAg positive, and this information appeared in several places on the record that was sent to the hospital. Despite this, her baby did not receive HBIG or the first dose of hepatitis B vaccine in the hospital. In fact, the hepatitis B vaccine order was crossed out in the infant's chart. Follow-up with the pediatrician on day six indicated that the baby still had not received any prophylaxis. The first dose of vaccine was given when the infant was three weeks of age, the second dose three months after the first, and the third dose six months after the first. The child's current status is unfortunate. Diagnosed HBsAg-positive at 19 months of age, the child is now being followed by a liver specialist for chronic hepatitis B."

"We have two cases where infants born to carrier mothers received the first dose of hepatitis B vaccine three weeks after birth and no HBIG. In one of the cases, a resident interviewed the mother who claimed she was not HBsAg positive."

"In 2000, we had 25 cases where the babies of positive moms did not receive HBIG at birth. Three of these babies are now infected. In one of the cases, the mother's status was erroneously





The Safety Net is there for  
**EVERYONE!**

My baby isn't possibly going to be exposed to the virus for many years, if ever. Why give the vaccine at birth?

If a baby gets infected at birth, there is a 90% chance they will be infected for their entire lifetime, and will also have a 25% chance of dying prematurely from liver failure or liver cancer in the future. Older children who are infected at a young age are also at risk for life-long infection and its potential complications. (In comparison, only about 4% of adults who are infected with HBV become chronically infected.)

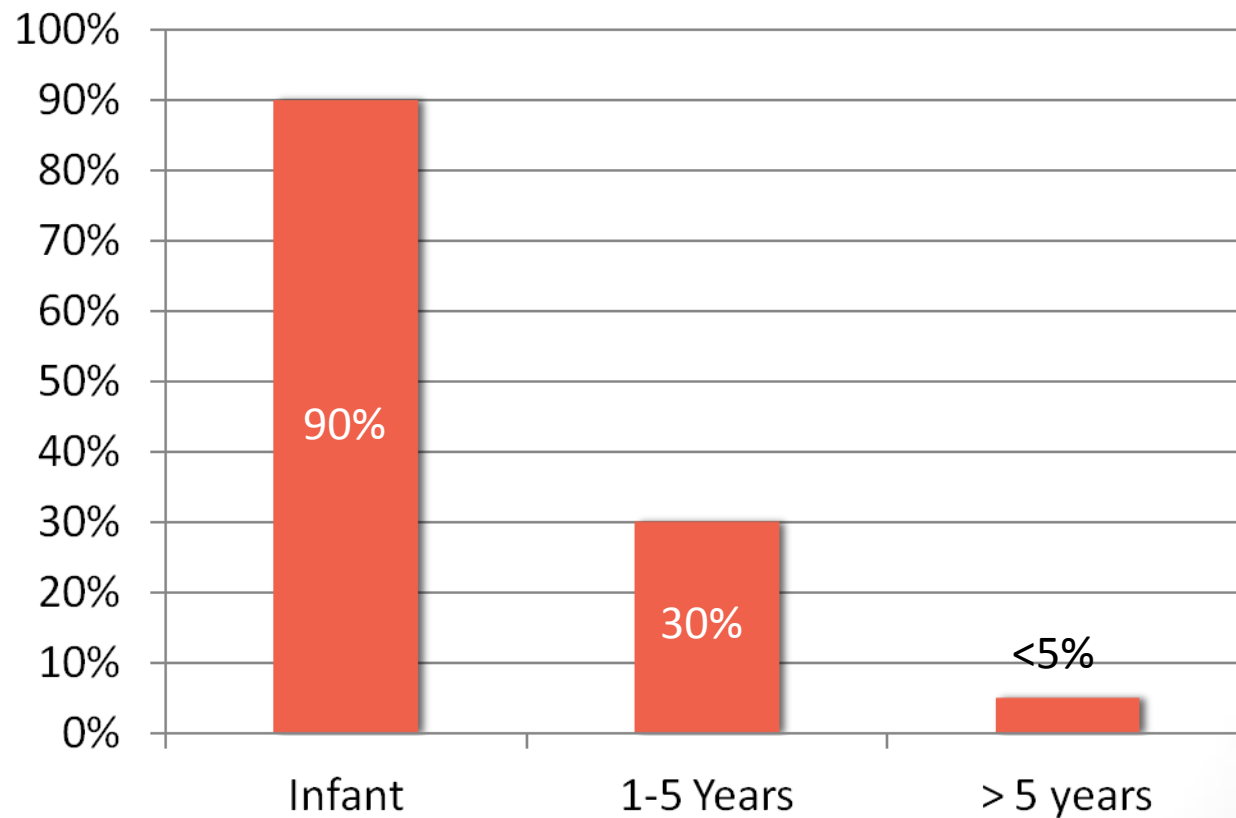


#### Hepatitis B

What Hospitals Need to Do to Protect Newborns



# Risk of developing chronic hepatitis B by age at infection



## Hepatitis B

What Hospitals Need to Do to Protect Newborns

Vaccines are full of dangerous [fill in the blank] that will hurt my infant. Or, at least, I want to wait to vaccinate until my baby is bigger and better able to handle vaccination.

This is obviously a big subject that could be a day-long presentation in and of itself. Three good sources of information for you to explore:



# Resources for vaccine-hesitant parents

- IAC's "Responding to Parents' Concerns" web section:  
[www.immunize.org/talking-about-vaccines/responding-to-parents.asp](http://www.immunize.org/talking-about-vaccines/responding-to-parents.asp)
- Vaccine Education Center's Q&A sheets for parents (including info on ingredients, "too many, too soon," autism, etc.): <http://www.chop.edu/centers-programs/vaccine-education-center/resources/vaccine-and-vaccine-safety-related-qa-sheets#.Vq-McL3XmIZ>
- CDC's Provider Resources for Vaccine Conversations with Parents:  
[www.cdc.gov/vaccines/hcp/conversations/index.html](http://www.cdc.gov/vaccines/hcp/conversations/index.html)



## Clear Answers and Smart Advice About Your Baby's Shots

By Ari Brown, MD, FAAP



Dr. Brown received her medical degree from Baylor College of Medicine in Houston, Texas, she did her pediatric residency at Harvard Medical School/Boston Children's Hospital. In private practice since 1995, Dr. Brown is a frequent best known as the coauthor of the #1 parenting book series—*Exhausting 411: Clear Answers and Smart Advice for Your Pregnancy, Baby 411, and Toddler 411* (Bantam/Paul Press).

It's time to jump into just a hot topic you'll find in parent circles—vaccines. Nothing gives us as the blood there does more than a good of faith/deliberate on vaccinating your child. And after the 2013 measles outbreak at Disneyland, the silent majority of parents who believe in vaccinations are far from alone.

A head-up: since there is so much misinformation about these vaccines, you need to be armed with detailed, accurate information. And for the rest of this book, that is what you will get in this chapter. The information we present is based on scientific evidence and solid peer-reviewed research. Remember our motto: show us the science! Your child is too precious to make such important decisions on any level. This chapter is not based on personal anecdotes, conspiracy theories, "research" done in people's basements (we're not kidding), or the crusades of fan clubs.

However, before we get to our take on this debate, let's go back in time a bit. Well, more than a bit. How did the human race survive when our early human didn't? Yes, making tools and finding food most efficiently played a big role, but another by element was built coalitions. And we developed a sense of responsibility—to ourselves and to our society. Every time we engaged in a tragedy in our nation—whether it's 9/11, Hurricane Sandy, or the Boston Marathon bombing—we are reminded of how we are just individuals living in our own little world. It's part of our *crisis* duty to lead a hand and take care of our neighbors.

So, what's this pandemic have to do with vaccines? Again, it is our responsibility to work together as a community. This time, the subject isn't terrorism or storms, but something that is just as terrifying: infectious disease. Consider a bit of history: in the 1930s, people would have seven or eight children in their families and only half of them would survive childhood. And in the 1940s, people would have had the ages listed on the headstones. Many of the diseases that killed those children are now prevented by vaccination. It's a fact: vaccines have increased the life expectancy of our nation's children. That's why our grandparents and parents embraced them.

Here's a crucial point: the key to a vaccine's success is that everyone in the community gets vaccinated. Vaccines won't work if a large number of folks just choose to opt out of the system and their responsibility. Please keep this in mind as you read about vaccines. Your

decision (and every other parent's decision) affects your child. And society as a whole. Games are either simple creations... they just put for a time period to infect. They don't play politics.

### REALLY CHECK

The concept of "public health" has been around since antiquity. Obviously, when faced with a central interest in keeping their subjects healthy so they had a society to rule. Through the years, governments have been responsible for many different programs. The most important advances in public health have been vaccination programs, water purification, and waste disposal/hygienization systems. The only way for public health to work, though, is for all members of the community to follow the same rules.

### Who came up with the idea of vaccinations in the first place?

It took centuries of observation as well as trial and error (and some times, even more death). The first real step was observing the disease, in this case, smallpox. Smallpox was a deadly disease that, historically, wiped out entire civilizations. The earliest descriptions can be found as far back as the sixth and seventh centuries among Turks. In fact, "vaccination" is the collecting of a person with the disease in hopes of introducing a mild form and then creating immunity, was practiced first in the 1700s in England among Lady Mary Wortley Montagu, who lived in Constantinople and learned of the practice of inoculation (known then as variolation). She had her son inoculated and subsequently, brought the practice back to England.

At about the same time, an English country doctor, Edward Jenner, made an interesting connection: milkmaids who had been exposed to cowpox in common disease to cattle at the time were seemed to get smallpox infections during epidemics. He began to study the idea that vaccinating humans with cowpox virus would make them immune to smallpox. In 1789 he published a paper on the issue and called it "Vaccination." That is, by the way, that Dr. Jenner's vaccine was created with completely open arms. In the nineteenth century it was a group of people who were not vaccinated who were the cause of the anti-vaccination lobby that has been around a long time. Of course, in those days, they could be prosecuted for refusing to vaccinate.

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[www.immunize.org/guiding411/411.pdf](http://www.immunize.org/guiding411/411.pdf) (ISBN #0-7636-0317-0)



## Recommended Immunization Schedule: What You Should Know

The Children's Hospital of Philadelphia

VACCINE EDUCATION CENTER

Although only one version of the immunization schedule is endorsed by the Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics (AAP) and the American Academy of Family Physicians (AAFP), some parents prefer to be selective about which vaccines their children receive and when. Unfortunately, this approach can leave children susceptible to certain diseases at a time when they must not protect, worse, some children never catch up completely.

### Q: Who determines when vaccines are added to the immunization schedule?

A: Before a vaccine can be added to the immunization schedule, it must be licensed by the Food and Drug Administration (FDA). Vaccines are the FDA's decision to include and receive vaccine status; sometimes they represent a new vaccine, sometimes they are a new formulation of an existing vaccine. The FDA determines whether the vaccine is safe and whether it works (efficacy). Studies prove to humans about how fast it is to get and how long it lasts. For example, if it is the purpose from the pre-clinical studies of one of the vaccine vaccines was used, the study would be higher than the Tropic Virus Building.

Once a vaccine is licensed, updates from the CDC, AAP, and AAFP independently review data from scientific studies to determine whether or not a vaccine should be added to the immunization schedule. They only will think of the safety and efficacy of the vaccine; they will also look at disease rates and susceptibility populations to determine if the vaccine is needed in the community and, if so, who should get it. This recommendation is compiled to create the immunization schedule.

If a vaccine is recommended at an age when other vaccines are already given, the vaccine is made at the age of the child who will receive it. It is also when given to the child who will receive it. For example, if a vaccine is recommended at an age when other vaccines are already given, the vaccine is made at the age of the child who will receive it. It is also when given to the child who will receive it. For example, if a vaccine is recommended at an age when other vaccines are already given, the vaccine is made at the age of the child who will receive it. It is also when given to the child who will receive it.

### Q: How are the amounts of immunological components in a vaccine determined?

A: Vaccine doses are not chosen arbitrarily. During the late phase of vaccine development, different doses are tested to determine the best effective dose for the target group. For example, the vaccine vaccine was not given to the child who will receive it. For example, if a vaccine is recommended at an age when other vaccines are already given, the vaccine is made at the age of the child who will receive it. It is also when given to the child who will receive it.

Vaccine developers must balance good medicine and good economics. Giving larger doses of active vaccine than required would increase the side effects and giving too little of the vaccine would have efficacy. It's a fine balance.

For the latest information on all vaccines, visit our website at

[vaccine.chop.edu](http://vaccine.chop.edu)

November 2012

Information for health care professionals

## Talking with Parents About Vaccines for Infants Strategies for Health Care Professionals



Immunization professionals and parents agree: times have changed.

Because of questions or concerns about vaccines, well-child visits can be stressful for parents. As their infant's health care provider, you remain parents' most trusted source of information about vaccines. This is true even for parents with the most questions and concerns. Your personal relationship uniquely qualifies you to help support parents in understanding and choosing vaccinations.

However, time for infant health evaluation at each well visit is at a premium, as you check physical, cognitive, and other milestones and advise parents on what to expect in the coming months. Therefore, making time to talk about vaccines may be stressful for you. But when an infant is due to receive vaccines, now is more important than making the time to assess the parents' information needs for it as well as the role they desire to play in making decisions about their child's health, and then following up with communication that meets their needs.

When it comes to communication, you may find that similar information is the science or anecdotal or some mix of the two—works for most parents you see. But keep a watchful eye to be sure that you are connecting with each parent to maintain trust and keep lines of communication open.

We hope that these brief reminders—and the materials that you, your staff, and parents can find on our website—will help ensure your continued success in immunizing infants and children. Success may mean that all vaccines are accepted when you recommend them, or that some vaccines are scheduled for another day. If a parent refuses to vaccinate, success may simply mean keeping the door open for future discussions about choosing vaccination.

### THIS RESOURCE COVERS:

- What you may hear from parents about their vaccine safety questions and how to effectively address them
- Proven communication strategies and tips for having a successful vaccine conversation with parents
- This brochure is part of a comprehensive set of educational materials for health care professionals and parents available at <http://www.cdc.gov/vaccines/consumers>

Nurses, physician assistants, and other office staff play a key role in establishing and maintaining a practice-wide commitment to communicating effectively about vaccines and maintaining high vaccination rates: from providing parents with educational materials, to being available to answer their questions, to making sure that families who may opt for extra visits for vaccines make and keep vaccine appointments.



## Hepatitis B is a serious disease... Make sure your child is protected!

### What is hepatitis B?

Hepatitis B is a serious liver disease caused by a virus.

### How do you catch hepatitis B?

Your child can get infected with hepatitis B if he or she has contact with an infected person's blood. Babies can get the virus from their infected mothers at birth or if they live with or are cared for by an infected person. The virus can be spread just by sharing a toothbrush with an infected person.



### Is hepatitis B serious?

Yes! An infected person can be sick for weeks or months, be hospitalized, and even die.



Ask your doctor provider if your child is up to date for all vaccines.

Babies and many young children who get infected can have the virus in their bodies for life. Most infected people do not feel sick, but the virus can cause serious problems like liver failure or liver cancer later in life.

### Is my child at risk?

Your child is more likely to become infected with hepatitis B if a family member or caregiver is infected. However, exposure to any infected person's blood can cause hepatitis B infection. Anyone can become infected with hepatitis B virus at any time during their lives.

### How can I protect my child from hepatitis B?



Ask your doctor provider if your child is up to date for all vaccines.

Vaccination is the best way to protect your child from hepatitis B. It is important that babies get the first dose of vaccine in the hospital at birth so they will be protected from the virus as early as possible. They should get 2 or 3 more doses (depending on the vaccine used) at later checkpoints.

Older children and teens who haven't been vaccinated should get their series of hepatitis B shots as soon as possible.

► For more information, visit [www.vaccineinformation.org](http://www.vaccineinformation.org)



Technical content reviewed by the Centers for Disease Control and Prevention  
Saint Paul, Minnesota • [www.immunize.org](http://www.immunize.org)  
[www.immunize.org/guiding411/411.pdf](http://www.immunize.org/guiding411/411.pdf) (ISBN #0-7636-0317-0)

## El aluminio en las vacunas: Lo que debe saber

The Children's Hospital of Philadelphia

VACCINE EDUCATION CENTER

Número 5, invierno de 2014

El aluminio está presente en varias vacunas para mejorar la respuesta inmunitaria. A algunos padres les preocupa que el aluminio en las vacunas pueda ser perjudicial para los bebés. Sin embargo, los bebés sanos eliminan el aluminio de su organismo rápidamente sin efectos perjudiciales.

### ¿Qué es el aluminio?

R: El aluminio es el metal más común que se encuentra en la naturaleza. Está presente en el agua que bebemos, el aire que respiramos y en los alimentos que comemos.

### ¿Hay aluminio en las vacunas?

R: Si. El aluminio está presente en las vacunas que previenen la hepatitis A, la hepatitis B, la difteria, el tétanos, y el Haemophilus influenzae tipo b, el virus del papilloma humano y el sarampión. El aluminio no está presente en las vacunas contra la influenza, las vacunas contra el polio o en las vacunas que contienen virus vivos, como las que previenen el sarampión, la paperola, la rubéola, la varicela y el rotavirus.

### ¿Por qué hay aluminio en las vacunas?

R: El aluminio está presente en ciertas vacunas para mejorar la respuesta inmunitaria. Las vacunas que se utilizan para mejorar la respuesta inmunitaria se denominan vacunas adyuvantes. Los adyuvantes a menudo parecen ser una sustancia metálica de la vacuna y a veces dolor. La razón de aluminio como el hidróxido de aluminio, el hidróxido de aluminio y el sulfato potásico de aluminio se usan comúnmente para mejorar la respuesta inmunitaria a las vacunas desde hace más de 70 años.

### ¿Cuánto aluminio hay en las vacunas?

R: Durante los primeros 6 meses de vida, los bebés pueden recibir alrededor de 4 miligramos de aluminio en las vacunas. Esto se ve mucho en relación a la cantidad de aluminio que se encuentra en un grano de arroz o en un grano de arroz de arroz. Los bebés sanos eliminan el aluminio de su cuerpo a una velocidad de 1 miligramo de aluminio por día. Los bebés sanos eliminan el aluminio de su cuerpo a una velocidad de 1 miligramo de aluminio por día. Los bebés sanos eliminan el aluminio de su cuerpo a una velocidad de 1 miligramo de aluminio por día.

R: ¿Qué sucede con el aluminio después de que ingresa al organismo?

R: La mayor parte del aluminio que ingresa al organismo se elimina rápidamente. A pesar de que la cantidad de aluminio presente en las vacunas ingresa al sistema circulatorio, menos del 1 por ciento del aluminio presente en los adyuvantes pasa a la sangre y a través de la barrera.

Si embargo, una vez que el aluminio está en el sistema circulatorio, se absorbe más rápido que el aluminio de los alimentos. Después de 48 horas, el aluminio se elimina a una velocidad de 1 miligramo por día. El aluminio se elimina a una velocidad de 1 miligramo por día. El aluminio se elimina a una velocidad de 1 miligramo por día. El aluminio se elimina a una velocidad de 1 miligramo por día.

### ¿Qué pasa con el aluminio retenido por el organismo?

R: Con el tiempo, la pequeña cantidad de aluminio retenido por el organismo se va acumulando. La mayoría del aluminio (50 a 60 por ciento) se acumula en los huesos, pero en los bebés sanos el aluminio del 25 por ciento se acumula en el cerebro (alrededor del 1 por ciento). La cantidad máxima de aluminio retenido en el cerebro es de 1 miligramo por kilogramo de peso corporal. El aluminio se elimina a una velocidad de 1 miligramo por kilogramo de peso corporal. El aluminio se elimina a una velocidad de 1 miligramo por kilogramo de peso corporal. El aluminio se elimina a una velocidad de 1 miligramo por kilogramo de peso corporal.

Para ver la información más reciente sobre todas las vacunas, visite nuestro sitio web

[vaccine.chop.edu](http://vaccine.chop.edu)

### INFORMATION FOR PARENTS

DISEASES AND THE VACCINES THAT PREVENT THEM

## Hepatitis B and the Vaccine (Shot) to Prevent It

The best way to protect against hepatitis B is by getting the hepatitis B vaccine. Doctors recommend that all children get the vaccine.

### Why should my child get the hepatitis B shot?

The hepatitis B shot:

- Protects your child against hepatitis B, a potentially serious disease.
- Protects other people from the disease because children with hepatitis B usually don't have symptoms, but they may pass the disease to others without anyone knowing they were infected.
- Prevents your child from developing liver disease and cancer from hepatitis B.
- Keeps your child from missing school or childcare (and keeps you from missing work to care for your sick child).

### Is the hepatitis B shot safe?

The hepatitis B vaccine is very safe, and it is effective at preventing hepatitis B. Vaccines, like any medicine, can have side effects. But serious side effects from the hepatitis B vaccine are extremely rare.

### What are the side effects?

Most people who get the hepatitis B vaccine will have no side effects at all. When side effects do occur, they are often very mild, such as a low fever (less than 101 degrees) or a sore arm from the shot.

### What is hepatitis B?

Hepatitis B is a contagious liver disease caused by the hepatitis B virus. When a person is first infected with the virus, he or she can develop an "acute" (short-term) infection. Acute hepatitis B refers to the first 6 months after someone is infected with the hepatitis B virus. This infection can range from a very mild illness with few or no symptoms to a serious condition requiring hospitalization. Some people are able to fight the infection and clear the virus. For others, the infection remains and is "chronic" or lifelong. Chronic hepatitis B refers to the infection when it remains active instead of getting better after 6 months. Over time, the infection can cause serious health problems, and even liver cancer.



Doctors recommend that your child get 3 doses of the hepatitis B shot for best protection. Ask your doctor when your child should get the next shot. Typically, children get one dose at each of the following ages:

- Shortly after birth
  - 1 through 2 months
  - 6 through 18 months
- Your child may get a 4th dose depending on the brand of vaccines the doctor uses.







Just to be clear... none of these tips are guaranteed to work miracles!  
(but every little bit of improvement helps)

# Ways to encourage more qualifying birthing centers apply to IAC's Hepatitis B Birth Dose Honor Roll




Hepatitis B

What Hospitals Need to Do to Protect Newborns

# Promoting the Birth Dose

## Give birth to the end of Hep B

FROM THE IMMUNIZATION ACTION COALITION



**One in three U.S. newborns leaves the hospital unprotected from life-threatening hepatitis B infection. As a result, approximately 800 U.S. newborns are chronically infected each year through perinatal exposure.**

A birth dose of HepB vaccine can prevent perinatal transmission – yet today, only 69% of U.S. infants receive the vaccine within three days of birth. That's why the Immunization Action Coalition (IAC) is urging hospitals and birthing centers to meet the national standard of care by providing a universal birth dose of HepB vaccine.

**Why should we give HepB vaccine to all newborns?**

- **It prevents mother-to-infant transmission**  
Prevents 70%–95% of transmission to infants born to HBsAg-positive women
- **It prevents household transmission**  
Protects infants from infected family members and other caregivers
- **It provides protection if medical errors occur**  
Provides a safety net to prevent perinatal transmission when medical errors occur

**Why is a safety net needed?**  
Because medical errors happen!

**Reported medical errors include:**

- Ordering the wrong hepatitis B screening test
- Misinterpreting or mistranscribing hepatitis B test results
- Failing to communicate results to or within the hospital
- Not giving hepatitis B vaccine to infants born to mothers of unknown HBsAg status within 12 hours of birth
- Not giving prophylaxis to an infant even when the mother's HBsAg-positive status is documented

**To comply with the national standard of care from CDC and to meet the quality measure of the National Quality Forum, birthing institutions should:**

1. Implement the recommended "universal HepB vaccine birth dose policy," by way of a standard newborn admission order. This ensures that every infant receives HepB vaccine at birth, no later than discharge from the birth unit.
2. Follow national recommendations for prophylaxis of infants born to women who are HBsAg positive or whose HBsAg status is unknown.
3. Measure and report the percentage of newborns who receive HepB vaccination before discharge.

**The HepB birth dose is recommended by the:**


- American Academy of Family Physicians (AAFP)
- American Academy of Pediatrics (AAP)
- American College of Obstetricians and Gynecologists (ACOG)
- Centers for Disease Control and Prevention (CDC)


CDC's complete HepB birth dose recommendations are available at [www.cdc.gov/mmwr/PDF/jr/n5416.pdf](http://www.cdc.gov/mmwr/PDF/jr/n5416.pdf)

**IAC's complete guide**

**Hepatitis B: What Hospitals Need to Do to Protect Newborns** is a complete resource to help birthing institutions establish, implement, and optimize their birth dose policies.

Endorsed by AAFP, AAP, ACOG, and CDC, IAC's e-book breaks new ground as a policy and best practice guide for newborn HepB immunization.



 **Download the e-book at [www.immunize.org/protect-newborns](http://www.immunize.org/protect-newborns)**

[www.immunize.org/catg.d/p2201.pdf](http://www.immunize.org/catg.d/p2201.pdf)  
[www.immunize.org/protect-newborns](http://www.immunize.org/protect-newborns)

# Promoting the HepB Birth Dose Honor Roll

FROM THE IMMUNIZATION ACTION COALITION

## Do you qualify for the Hepatitis B Birth Dose Honor Roll?

### If so, apply today.

The Immunization Action Coalition (IAC) is recognizing hospitals and birthing centers that have attained 90% or greater coverage rates for administering hepatitis B vaccine at birth and have met specific additional criteria. These criteria define the important elements of written birth dose policies aimed at protecting newborns, including when medical errors occur.

#### Criteria for Inclusion into the Honor Roll

To be included in IAC's Hepatitis B Birth Dose Honor Roll, a birthing institution must have:

- ☒ Achieved, over a 12-month period, a coverage rate of 90% or greater for administering hepatitis B vaccine before hospital discharge to all newborns (regardless of weight), including those whose parents refuse vaccination, and
- ☒ Implemented certain written policies, procedures, and protocols to protect all newborns from hepatitis B virus infection prior to hospital discharge.

To apply for the Birth Dose Honor Roll, visit

[www.immunize.org/honor-roll/birthdose](http://www.immunize.org/honor-roll/birthdose)

#### Benefits

- Inclusion in online Honor Roll
- Announcement of achievement in nation's largest immunization e-newsletter, *IAC Express*, sent to approximately 50,000 subscribers
- Receipt of beautiful 8.5" x 11" color award certificate suitable for framing
- Peer recognition in the immunization community

IMMUNIZATION ACTION COALITION Saint Paul, Minnesota • 651-647-9009 • [www.immunize.org](http://www.immunize.org) • [www.vaccineinformation.org](http://www.vaccineinformation.org)  
[www.immunize.org/catg.d/p2205.pdf](http://www.immunize.org/catg.d/p2205.pdf) • Item #P2205 (7/16)



The universal hepatitis B vaccine birth dose is supported by leading health organizations

- American Academy of Family Physicians (AAFP)
- American Academy of Pediatrics (AAP)
- American College of Obstetricians and Gynecologists (ACOG)
- Centers for Disease Control and Prevention (CDC)

[www.immunize.org/catg.d/p2205.pdf](http://www.immunize.org/catg.d/p2205.pdf)  
[www.immunize.org/protect-newborns](http://www.immunize.org/protect-newborns)



# How to apply to the honor roll

## Online

## Paper

### Application for Enrollment into the Hepatitis B Birth Dose Honor Roll

FIELDS MARKED WITH \* ARE REQUIRED

☐ We are already a Hepatitis B Birth Dose Honor Roll honoree.

Please tell us about the person filling out this form

\* First Name:

\* Last Name:

\* Job Title:

\* Facility Name:

\* Department:

\* Address:

\* City:

\* State:

\* Zip code:

\* Phone:

\* Email:

Please tell us about your hospital or birthing center

\* Name of Institution:

\* Address:

### Hepatitis B Birth Dose Honor Roll Application



#### APPLY FOR THE BIRTH DOSE HONOR ROLL

The Immunization Action Coalition's Hepatitis B Birth Dose Honor Roll recognizes U.S. birthing institutions that have attained a birth dose coverage rate of 90% or greater and have met specific additional criteria. These criteria help define the important elements of a birth dose policy that are needed to ensure newborns do not fall through the cracks when medical errors occur.

You can also apply online at [www.immunize.org/honor-roll/birthdose/apply.aspx](http://www.immunize.org/honor-roll/birthdose/apply.aspx).

To be included in IAC's Hepatitis B Birth Dose Honor Roll, a birthing institution must have:

- ☒ Achieved, over a 12-month period, a coverage rate of 90% or greater for administering hepatitis B vaccine before hospital discharge to all newborns (regardless of weight), including those whose parents refuse vaccination. (Newborns who are transferred to a different facility after birth due to medical problems do not need to be included in the denominator.)
- ☒ Implemented written policies, procedures, and protocols to protect all newborns from hepatitis B virus infection prior to hospital discharge.

### Application for Enrollment into the Hepatitis B Birth Dose Honor Roll

FIELDS MARKED WITH \* ARE REQUIRED

☐ We are already a Hepatitis B Birth Dose Honor Roll honoree.

Please tell us about the person filling out this form

\* FIRST NAME

\* LAST NAME

\* JOB TITLE

\* FACILITY NAME

\* DEPARTMENT

\* ADDRESS

\* CITY/STATE/ZIP

\* PHONE

\* EMAIL

**NOTE:** We notify the applicant and their perinatal hepatitis B coordinator upon acceptance into the honor roll.

\* NAME OF PERINATAL HEPATITIS B COORDINATOR

\* EMAIL

\* Indicate the type of facility:

☐ Hospital ☐ Independent Birthing Center  
OTHER

\* Which most closely describes the type of community your hospital or birthing center resides in?

☐ Urban ☐ Suburban ☐ Rural

\* Approximately how many total beds are in your entire healthcare facility?

\* Approximately how many beds are in your birthing unit?

\* Approximately how many births occur per year in your healthcare facility?

CONTINUED ON THE NEXT PAGE ►

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[www.immunize.org/catg.d/p2208.pdf](http://www.immunize.org/catg.d/p2208.pdf) • Item #P2208 (6/17)

# How can qualifying for the honor roll help a birthing institution?

Primarily, qualifying means the institution is following the STANDARD OF CARE, and correctly protecting newborns from lifelong chronic hepatitis B infection. But there are less altruistic reasons too!

Ceremoniously presenting the staff with a beautiful certificate (especially when state/local health departments are involved), can be a morale boost for those who have worked hard to promote and provide the birth dose.



# Immunization Action Coalition

recognizes the exceptional achievement of

## Albany Medical Center

ALBANY, NEW YORK

and enrolls the hospital into its

## Hepatitis B Birth Dose Honor Roll



for its noteworthy dedication to patient safety by establishing a policy to administer the first dose of hepatitis B vaccine to newborns prior to hospital discharge, and achieving a coverage rate of 99 percent.

The birth dose of hepatitis B vaccine is critical to safeguarding all infants from hepatitis B virus infection which can lead to chronic liver disease.

We applaud your dedication to protecting patients.

DEBORAH L. WEXLER, MD, Executive Director

Presented July 16, 2013







Feeling proud of their achievement!

# Another possible way for honorees to benefit from qualifying for the honor roll

- Hospitals and birthing institutions can publicize their success via corporate newsletters and even local newspapers.
- IAC provides a sample press release that can be customized.
- Let others know that this is a hospital that CARES about the newborns in its care!



---

[Hospital or Birthing Center name] **Honored for Hepatitis B Vaccine Birth Dose Rate**

[City, State, Date]— [Hospital or Birthing Center name] has been recognized by the Immunization Action Coalition (IAC) [and the State Health Department name *(check with your perinatal hepatitis B coordinator for permission to add the name of your state health department to the press release)*] for achieving one of the highest reported rates in the state for its work to protect newborns from hepatitis B virus infection

[“Quote from leadership of the hospital or birthing center,”] said [Name, Title, and Affiliation].

[Hospital or Birthing Center name] is the newest entry into IAC’s Birth Dose Honor Roll ([www.immunize.org/honor-roll/birthdose](http://www.immunize.org/honor-roll/birthdose)), which recognizes hospitals and birthing centers that have attained high coverage levels for administering the hepatitis B vaccine at birth. [Hospital or Birthing Center name] immunized [enter number] percent of babies [enter 12-month time period] and took additional steps to prevent perinatal transmission of hepatitis B.

The national standard of care to prevent hepatitis B virus infection in babies is to administer hepatitis B vaccine to all newborns before they leave the hospital or birthing center. This standard is being adopted by centers of healthcare excellence nationwide as a safety net to protect newborns from a wide range of medical errors that lead to babies being unprotected from perinatal hepatitis B infection.

“Hospitals and birthing centers have a responsibility to protect babies from life-threatening hepatitis B infection,” said Deborah Wexler, MD, executive director and founder of IAC. “[Hospital’s name] commitment to the best practice of hepatitis B vaccination at birth has shown them to be a leader in preventing the transmission of the hepatitis B virus.”

[Add a brief paragraph about your hospital or birthing center, including hyperlinks to your institution’s website and social media websites too.]

[Add contact information for public information officer or media representative at your hospital or birthing center: Contact name, telephone number, email address.]

###



## Sterling birthing center makes vaccine honor roll

Hepatitis B shot given to 94 percent of SRM newborns

By Jeff Rice

Journal-Advocate staff writer

POSTED: 12/11/2017 02:10:43 PM MST



Birthing Center nursing staff: from left, Alicia Bacon (w/ glasses), Traci Sherman, holding her son Paxton, Lisa Hughes, Kristen Cecil and Carol Herrboldt. (Jeff Rice / Sterling Journal-Advocate)

Sterling Regional MedCenter has been recognized by the Immunization Action Coalition for

## Huron Medical Center honored for hepatitis B vaccine birth dose rate

Submitted to the Tribune Updated 5:58 pm, Tuesday, January 17, 2017

✉️ 📧 📧 📧 📧 📧

**BAD AXE** — Huron Medical Center has been recognized by the Immunization Action Coalition (IAC) for achieving one of the highest reported rates in the state for its work to protect newborns from hepatitis B virus infection.

"We are honored to have been recognized for the effort Huron Medical Center has made to protect the babies born at our birthing center from hepatitis B virus infection," said Heather Navarro, RN, who is the birthing center director at Huron Medical Center.

Huron Medical Center is the newest entry into IAC's Birth Dose Honor Roll ([www.immunize.org/honor-roll/birthdose](http://www.immunize.org/honor-roll/birthdose)), which recognizes hospitals and birthing centers that have attained high coverage levels for administering the hepatitis B vaccine at birth. Huron Medical Center immunized 91 percent of babies in the time period of July 2015 through June 2016, and took additional steps to prevent perinatal transmission of hepatitis B.

The national standard of care to prevent hepatitis B virus infection in babies is to administer hepatitis B vaccine to all newborns before they leave the hospital or birthing center. This standard is being adopted by centers of healthcare excellence nationwide as a safety net to protect newborns from a wide range of medical errors that lead to babies being unprotected from perinatal hepatitis B infection.

"Hospitals and birthing centers have a responsibility to protect babies from life-threatening hepatitis B infection," said Deborah Wexler, MD, executive director and founder of IAC. "Huron Medical Center's commitment to the best practice of hepatitis B vaccination at birth has shown them to be a leader in preventing the transmission of the hepatitis B virus."

## Beaumont recognized for efforts to immunize newborns against hepatitis B

David Burge, El Paso Times

Published 11:30 a.m. MT Sept. 24, 2017 | Updated 9:46 a.m. MT Sept. 25, 2017



From left, Maj. Preeti Jackson, Dr. Stacey Frazier, Maj. Rene Key and Capt. Christopher Stone help spearhead William Beaumont Army Medical Center's efforts to immunize newborns against hepatitis B.

(Photo: DAVID BURGE / EL PASO TIMES)

Common risk is not implemented when parents, procedures and protocols to encourage the vaccination of newborns for hepatitis B before their discharge.



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"Lamesa's ONLY Home Owned and Operated Bank Since 1906"  
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## Award for immunizations Hospital recognized for protection of newborns

Saturday, June 11, 2016 5:56 AM

Medical Arts Hospital in Lamesa has been recognized by the Immunization Action Coalition (IAC) and the Texas Department of State Health Services Immunization Division for achieving one of the highest reported rates in the state for its work to protect newborns from hepatitis B virus infection.

"We put our patients first, even the newest ones. Thanks goes to our entire nursing staff for their commitment to this initiative," said Letha Stokes, Chief Executive Officer.

Ouida Chase is Clinical Coordinator of Labor/Delivery at Medical Arts Hospital. She received the honor on June 1.

Medical Arts Hospital is the newest entry into IAC's Birth Dose Honor Roll, which recognizes hospitals and birthing centers that have attained high coverage levels for administering the hepatitis B vaccine at birth. Medical Arts Hospital immunized 95 percent of babies born in the year of 2015 and took additional steps to prevent perinatal transmission of hepatitis B.

The national standard of care to prevent hepatitis B virus infection in babies is to administer hepatitis B vaccine to all newborns before they leave the hospital or birthing center. That standard is being adopted by centers of healthcare excellence nationwide as a safety net to protect newborns from a wide range of medical errors that lead to babies



HIGHLY RANKED Medical Arts Hospital Chief Nursing Officer Heidi Cobb and Clinical Coordinator of Labor/Delivery Ouida Chase accepted the certification of the Immunization Action Coalition and the Texas Department of State Health Immunization Division (TDSHS) for the highest reported rates in the state for administering the hepatitis B virus immunization to newborns. Josephine Lemines, the Regional Perinatal Hep. B HSR from TDSHS, presented the ladies with the honor. (Submitted

### Events

« January, 2018 »

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27						



On a purely pragmatic note, making the effort to qualify for IAC's honor roll should also make it easier for birthing institutions to meet other organizations' criteria. For example, the National Quality Forum Measure #0475 recommends that hospitals measure and report the "percent of live newborn infants that receive hepatitis B vaccination before discharge... excluding infants whose parents refuse vaccination."



#### Hepatitis B

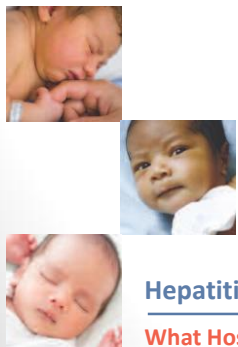
What Hospitals Need to Do to Protect Newborns

Questions?  
Email [birthdose@immunize.org](mailto:birthdose@immunize.org)





# Safety Net



## Hepatitis B

What Hospitals Need to Do to Protect Newborns